

Implementing a District -Wide Professional Development Initiative:

What It Means to Educate for the 21<sup>st</sup> Century

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## ABSTRACT

### Implementing a District -Wide Professional Development Initiative:

### What It Means to Educate for the 21<sup>st</sup> Century

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Focus on education for the future, often termed 21<sup>st</sup> Century education, is on the minds of educators and much is being said about particular ways to enact curricula and teaching that supports the needs of 21 century thinking, learning, and teaching. 21st century skills, frameworks, system/practitioner examples that apply these skills and a variety of literature on the different structures and content have been disseminated through articles, professional development, and district-wide initiatives. However, there is an absence of literature that focuses on how system wide initiatives, rooted in 21<sup>st</sup> Century research, impacts teachers and their perceptions of teaching and learning. In this study, the discourse on 21<sup>st</sup> Century education is defined in relation to educational frameworks that outline specific skills students and teachers need in order to be successful in academic and workplace settings in the 21<sup>st</sup> Century. The objective of the study was to answer the following research questions (1) How does a district-wide PD initiative focused on educating students for the 21<sup>st</sup> Century impact teachers' examinations and revisions of assessments, curricula, and instructional activities? (2) How does a district-wide PD initiative focused on educating students for the 21<sup>st</sup> Century impact three 10<sup>th</sup> Grade English teachers' examinations and revisions of their literature curricula and instructional activities? (3) What factors influence the ways teachers react to the PD plan implemented in the EEF initiative?

Through a qualitative examination of a professional development initiative called *Envisioning Education for the Future (EEF)* 2010-2013, this research study aims to bridge a gap between theory and practice by examining how Parnell School District attempts to achieve the goal of enhancing their teaching and preparation of students for the 21<sup>st</sup> Century. I explore how Parnell School District provided its teachers opportunities to focus on providing a more global-focused education by offering, a coherent professional development plan that focused on activities that included: assessment creation, instructional activity adaptation, curriculum design, practitioner reflection, and student work analysis.

Outcomes from this study include recommendations for how to overcome logistical obstacles; address teachers' varying levels of self-efficacy; adapt curricula, teaching strategies/activities, and classroom assessments to reflect more 21<sup>st</sup> Century skills. What was also revealed during this study was the emergence of a new discourse amongst teachers and researchers as they attempted to create a common language around 21<sup>st</sup> Century education. This discourse is referred to as a Critical 21<sup>st</sup> Century Discourse.

The EEF PD initiative encouraged individuals to examine their assumptions and biases by engaging teachers in deep questioning about their teaching philosophies in their particular disciplines, providing teachers with activities that facilitate teachers reflections on existing beliefs and ideologies and the impact thereof, and by providing teachers with the research literature and experiences that help broaden perspectives of underlying critical issues to investigate how teaching is impacted.

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## Chapter I

### INTRODUCTION: THE PLACE OF 21<sup>ST</sup> CENTURY SKILLS IN EDUCATION

#### **The Problem and Obstacles**

Across the nation, there has been a flurry of awareness raised on the ranking of national education systems. Recent headlines “‘Wake-up call’: U.S. students trail global leaders” (Armario, 2010), “The International PISA tests are Leading America Astray” (Eger, 2011), and “Education Secretary Arne Duncan Issues Statement on the Results of the Program for International Student Assessment” (Ed.Gov, 2010) suggest that America’s education system is in dire need of help. More specifically, a recent article on “The Creativity Crisis” published in *Newsweek* (Bronson & Merryman 2010) raised red flags at consistently declining Creativity Quotient (CQ) scores among young children since 1990 in the United States. Educators and policymakers were equating the skills required to be creative as the same skills that would propel students in the 21<sup>st</sup> Century, or at least score better on the PISA. At the same time, across the globe, in countries like England and China, the development of creativity in education had become a number one priority among educators (Darling-Hammond, 2010; Darling-Hammond & Wentworth, 2010; Sahlberg, 2011; Tucker, 2011). As the title of the article suggests, a multitude of

warnings from business leaders, educators, economists, and policymakers set a major tone of urgency about inadequately prepared students for the 21st century in the United States. In order to compete in an increasingly global, technologically and economically interdependent world, the authors argued (Kay, 2010, Wagner, 2008), U.S. education was threatened by a lack of exposure to and experience with key 21st century skills such as the development of creative capacities, including the facility and resourcefulness to solve non-standard, real-world problems using cross-disciplinary approaches (Choo, Sawch, & Villanueva, 2011).

It may be that every generation looks to upcoming generations to profess “when I was that age...” in order to point out the drastic differences in work ethic, maturity, and encountered hardships during work and school. Or there could be some substance to the comment. According to an interview study by Wagner (2008), the “lack of work ethic” in our young generation today may be a reality. Based on his findings, managers and human resource officials from a variety of corporations experienced a decrease in work ethic among their younger hires. Ranging from lack of respect, sloppy work, and focusing issues, the younger generation was observably missing non-cognitive skills like perseverance, alacrity, and agency. Wagner’s study directly correlated young people’s lack of work ethic to public education and the mediocrity teachers seem to accept of their students in school.

Kay (2010) reported similar findings from corporate leaders today – deficiencies found in even college-educated employees who entered the workforce. Kay correlated these deficiencies with the lack of 21st century skills (American Association of College and Universities, 2007; EnGauge, 2003; Jenkins, 2006; OECD, 2005; Partnership for 21st

Century Skills, 2001; Silva, 2008) being taught in schools, the very skills that would have supported innovation, creativity, critical thinking, and problem solving. While varied in tone and level of urgency, these warnings point to a need to re-examine and re-establish the place of creativity in American education and to re-consider new forms of assessment that promote creative and 21st century ways of thinking (Sawch, Villanueva, & Choo, 2010). One might ask: Is this a 'new' phenomena, or a rhetoric of decline that has been embedded into our perceptions of education and its role in educating future generations? In which case, we should ask ourselves whether it's about re-training our teachers so they are prepared to be in the classroom or opening up conversations and questioning existing structures in schools that hinder the fostering of spaces where teachers and students can safely take risks and engage in change.

Taking into consideration this alarm around declining creativity scores (Bronson & Merryman, 2010; Claxton, Pannells, & Rhoads, 2005) and ranking toward the bottom of the list on the PISA (OECD, 2002, 2003, 2010, 2012), many states, school districts, and individual educators are trying to find ways to "fix" the problem (Interview, Comm, 2012; Interview, Landon, 2011; Interview, Scarice, 2010). However, there is a gaping disconnect in how the Department of Education hopes to achieve this important call to action. Rather than having educators create the tools necessary to achieve the goal of integrating more creativity and 21st century skills into their daily teaching practices, top-down mandates of prescribed curricula and standardized assessments continue to be imposed by policymakers and external testing agencies on practitioners and schools (Huffington Post, 2012; Wallis, 2008). The removal of practitioners from the creation of large-scale standardized tests and initiatives (NCLB, 2001; Race to the Top, 2009)

consumed by test scores puts emphasis on continuous testing to see if students are improving rather than placing emphasis on what needs to be done to see student improvement. As the saying goes, “weighing a pig doesn’t fatten it” (Obama, 2009).

One reason for the removal of practitioners in the creation of large-scale standardized tests and national or statewide curricula was due to declining faith in the teaching "professional" (Schreck, 2009). The teaching profession seemed to be in doubt in many schools and districts across the United States (Swann, 2010). Teachers were not considered professionals able to make decisions about the scope and sequence of curricula or the assessments needed to effectively analyze student achievement. In turn, a flurry of prescribed curricula was imposed on teachers across the nation. Consequently, this directly affected teacher autonomy (Schreck, 2009; Swann 2010). With the obstacles of doubt, mandated curriculum, and disconnected standardized tests in place, is it possible to integrate 21st century skills and prepare our students for the future?

### **21st Century Skills**

Over the last decade, several education companies, consortia, researchers, and economic organizations, like the Organization for Economic Cooperation and Development (OECD), created similar, yet varying frameworks of "21st Century Skills" (Silva, 2008; American Association of College and Universities, 2007; Jenkins, 2006; OECD, 2005; EnGauge, 2003; Partnership for 21<sup>st</sup> Century Skills, 2001). A discussion of each of these frameworks will take place in Chapter II; however, after reviewing many frameworks, two particular skills consistently appeared across multiple interpretations of what skills were required in order to succeed in the 21st century. The skills required to engage in creative thinking and the skills needed to integrate and navigate various modes

of technology consistently cropped up during my review. One message ran clearly through various iterations of 21st century frameworks. Interestingly, terms that were used to describe creative thinking and elaborated on the opportunities that encouraged creativity were interchangeably used to describe 21<sup>st</sup> Century thinking and the opportunities that would facilitate 21<sup>st</sup> Century readiness in students. It was clear that 21st century readiness definitely focused on creativity and the environments and platforms that provided possibilities for creativity to flourish among students (Jenkins, 2006, 2008, 2010; Conley, 2011).

Although 21st Century Readiness, which frameworks assumed the inclusion of creativity, was explored in various ways depending on the framework, it was clear that the definitions of what we normally would have associated with "creativity" had increased in what was now considered to be creative. Creativity was being defined in many different ways. Creativity included various skills that were most commonly translated into: the ability to adapt to change (Darling-Hammond, 2009); work in teams collaboratively (Wagner, 2010; Darling-Hammond, 2009); be prepared to solve non-standard complex problems (Darling-Hammond, 2009); analyze and synthesize (ETS, 2011); reflect meta-cognitively to improve oneself; create-innovate and critique (Swann 2010); always engage in learning (Gee, 2009); and work across disciplines (Wagner, 2010). Twenty-first century skills continued to increase in number and evolve, and they were required in order to engage with technology (Jenkins, 2010; Lankshear & Noble, 2006; Seiter, 2007).

Some argued that the focus on 21st century skills in education was unwarranted by educators, arguing that the skills needed for the 17th century were the same as those

needed for the 21st century (Interview, Blau, January 2011). Others argued that the growing number of skills needed for technology could not be ignored, and in turn the skills for the 20th century would not be sufficient in a Web 2.0 World. Information and communications technologies continued to boom across the global market. It was undeniable how technology continued to pervade lives, eventually replacing human-operated jobs. It was clear that the skills required in the 20th century to engage in cognitive work and manual labor were being replaced, or had already been, by "growing proportions of the nation's labor force engaged in jobs that emphasized expert thinking or complex communication" (Dede, 2009, p. 1).

This inevitably resulted in the creation of numerous frameworks outlining 21st century skills by not only education specialists, but also most notably by government groups and economic organizations. It was apparent that the globalized market had taken hold of education policies, only to emphasize the increasingly corporate mentality of the 21st century. Although each 21st century framework differed from one to the other, they all succinctly represented what they interpreted to be the new skills required of participants in today's global economy. The frameworks focused on the skills and dispositions people needed to be competitive in the market, as opposed to specific content knowledge needed. As this shift in thinking occurred, schools and educators started to move from thinking about teaching separate silos of subjects (math, reading, writing, science) to more interdisciplinary ways of teaching. Moreover, educators came to realize the importance of transferable thinking skills that allowed students to engage in cross-disciplinary problem solving. Frameworks that highlighted cross-disciplinary teaching emphasized the importance of knowing how to apply skills in any content area or inter-

disciplinary scenario (Darling-Hammond, 2011; Sahlberg, 2011; Tucker, 2011).

Although defined slightly differently, it was glaringly apparent that higher order thinking skills and creativity were the top priorities in 21st century frameworks (Gardner, 2009; Kay 2010; Trilling & Fadel, 2011; Wagner 2011). Whether elicited through curiosity, risk taking, or innovation, creativity and higher order critical thinking overlapped in skills and dispositions (Csikszentmihalyi, 1996; DeBono, 2008; Gardner, 2009).

One way school districts approached the call to ensure their students were ready for the 21st century was through teacher professional development (Desimone, 2011; Davis & Krajcik, 2005; Derrick, 2003; Fishman, Marx, Best, & Tal, 2003). School districts realized that in order for their students to demonstrate readiness for the 21st century, it was essential for their teachers to first integrate 21st century ways of thinking within themselves in order to impact their daily teaching practices. By emphasizing the need for 21<sup>st</sup> Century thinking skills, school districts implemented district-wide professional development initiatives that aimed to promote the thinking habits required to think creatively in the 21<sup>st</sup> Century. School districts hoped their professional development initiatives engaged and prepared teachers with teaching methods that provided students with opportunities to be more creative, which in turn would deem them ready for the 21st century.

## **Rationale for the Study**

### **Research Purpose**

This study documents the development of a PD initiative that investigates what students need in order to be competitive citizens in a global 21<sup>st</sup> Century. In addition, this study documents the experiences of various teachers that engage in the EEF PD initiative



that is intended to help teachers think about the skills students and they themselves, as educators will need for the 21<sup>st</sup> Century. Lastly, the study examines the various conditions that impact the success of the EEF PD initiative.

### **Research Questions**

- (1) How does a district-wide PD initiative focused on educating students for the 21<sup>st</sup> Century impact teachers' examinations and revisions of assessments, curricula, and instructional activities?
- (2) How does a district-wide PD initiative focused on educating students for the 21<sup>st</sup> Century impact three 10<sup>th</sup> Grade English teachers' examinations and revisions of their literature curricula and instructional activities?
- (3) What factors influence the ways teachers react to the PD plan implemented in the EEF initiative?

**Pseudonyms.** Throughout this study, I use pseudonyms for all parties involved, all school buildings, and the school district. As per the IRB guidelines on anonymity and confidentiality, I selected names to mask the identities of my participants. I refer to the school district as situated in the northeast U.S., this was purposefully done so readers would not be able to determine which state I was working in. Although the sex of teachers remains the same based on their pseudonyms, initials have been replaced and age, years of experience have not been divulged for the macro portion of the study. In the micro study, I do reveal the number of years of teaching experience three specific teachers have in order to provide context for their experiences. I did not use a pseudonym for myself or my university affiliation to Teachers College, Columbia University and the

partnership forged between the anonymous school district in the study, as most readers would be able to garner the study took place during my time at TC as a doctoral student.

### **A District in Northeast U.S. Transcends the Trend**

In a district in the Northeast, the central administration decided to engage in a PD initiative that would help reform their existing teaching and assessment practices to reflect a more 21<sup>st</sup> Century Focus. Unlike some schools who are faced with many external pressures, this district had a prime opportunity to engage in a PD initiative of systemic change without external pressures such as questionable test scores, low teacher evaluations, low enrollment, dropping graduation rates, or high teacher turn over rates to hinder them. The district's mission was to implement more creative, 21st century thinking skills into their curricula by first examining their existing summative assessment practices, eventually to replace them with summative 21<sup>st</sup> Century performance based assessments. Parnell School District was taking proactive steps to figure out how to prepare their students and teachers for the 21st century. In Parnell, being prepared for the 21st century meant preparing students for active and competitive participation in economic and academic settings across the globe. This research study examined Parnell's district-wide professional development initiative on cultivating 21<sup>st</sup> Century teachers at both a macro and micro level. At the macro level, the study examined examples of teacher work and experiences situated across grade levels and subject areas. On a micro level, a small slice of this district-wide initiative was investigated closely through an examination of a trio of English teachers' experiences during a literature unit. Although many, if not all, aspects of the professional development initiative for a more 21st century schooling system would make a compelling study, I specifically studied the structures,

conditions, and activities teachers engaged with in the macro examination of the initiative, while in the micro examination of three English teachers, I studied a tenth grade world literature unit that was organized around nations/countries. I investigated teachers' intent to give adolescent readers exposure to different countries' literature as a vehicle in preparing students for the 21st century.

Although there were several teachers in various disciplines and alternate grade levels that I could have chosen to investigate at a micro level, I chose to focus on English teachers and their World Literature classes to demonstrate student readiness for the 21st century. World Literature classes are assumed to expose students to literature from around the world, which in turn is a necessary concept in a 21st century education. I was interested in investigating how the focus on the terms "global," "world," and critical social theories impacted teachers' understanding of "others" (Goodwin, 2003; Vinz, 2000; McCarthy, 1997; Ladson-Billings, 1994) and how it affected their views of (world) literature and their English curricula in meeting the challenge of integrating 21st century skills.

Literature education has proven to be a site where various elements of 21st century thinking and creativity are encouraged and nurtured. One thing that literature continues to provide for teachers, students, and readers in general is a way for those who engage with literature to live in other worlds through text. Literature has acted as mirrors of reality, one's self, and of things to come (Brink, 1993; Kristal, 2002; Rossi, 1989). Literature has opened windows into faraway lands, other people's lives, history, and dreams (Bolano, 2008; Innes, 2006). Literature has been the door that transports those who engage with it into alternate spaces and consciousness (Rossi, 1989; wa Thiong'o, 1982). Traditionally,

literature has provided so many "creative" elements for readers to engage with text and the realities that emerge from it. Now in the 21st century, in addition to asking readers to: imagine, to put oneself in another's shoes, take on different perspectives, empathize with a character, consider possibilities, detach from reality, tolerate ambiguity, adapt to new information, when engaging with literature; we must take a closer look at how literature might be conceived as a provocateur of "global" conceptions, where readers not only engage with the text and vicarious experiences elicited from it but with the world around them culturally and across time and space.

I also examine the common language that began to build among teachers due to their professional development experiences in this initiative. I will refer often to the common language that teachers created as an emergence of a new discourse throughout my analysis and examination of data. Although there are several definitions for discourse, I draw on Gee's (1989) concept of *discourse*, with a capital 'D', that represents an individual's ability to say, through writing, a combination of 'doing-being-valuing' and believing (p.6). Gee's discussion of various discourse communities (primary, secondary, dominant, non-dominant) offered a foundation to discuss the experiences teachers encountered as they began to create a new and common language around 21<sup>st</sup> Century skills.

### **Where the study took place**

This study took place in Parnell School District on the macro level and more specifically Parnell High School in the micro study. Parnell is an affluent suburban neighborhood in the U.S. The study documents the overall district implementation as well as presents an in depth examination of the experiences of three English teachers who go

through a professional development experience that is intended to support their own understandings of how to integrate 21st century skills into their literature curricula. This study pays equal amount of attention to the overall professional development initiative and the activities various teachers (including the three English teachers) engaged in on a weekly basis. It was necessary to give equal attention to both the macro and micro levels of the professional development initiative at Parnell, as they were situated within one another. During the analysis of this study, it was difficult to divorce the contexts of the larger picture and the experiences of the individual teachers from the emerging themes that interwove throughout my analysis from a macro to micro level. It would have compromised and jeopardized the analysis of this study if I only focused on one level of analysis by making my conclusions either so vague or so narrow in scope that any implications from the study might not be useable or transferable to alternate scenarios. Thus, I ensured that this study contributed to the fields of teacher development, 21st century skill development, and English education by examining both levels of context. It was also necessary to research how this phenomenon occurred to assessment practices at various levels (practitioner, state, national, and international), inform education policies, educational research, and to help bridge the gap between theory and practice. It was my hope and the purpose of this research study to capture how teachers planned backwards by first examining their assessment practices and by adapting them through a shared definition of 21<sup>st</sup> century skills. By investigating that process, it provides a glimpse into how the experience of examining their assessments impacted their conceptions of literature, critical theories, and global thinking as they engaged in professional development on 21st century skills and creativity.

## **Parnell School District's Professional Development Model**

Parnell School District engaged in a professional development initiative called Envisioning Education for the Future (EEF). The professional development initiative and programming was jointly created during my position as a doctoral student and professional development advisor with the *Center for Professional Education of Teachers*, at Teachers College, Columbia University. Parnell School District administrator Ted Scots and I created the programming together in concert with a team of Teachers College research assistants who were hired to help in the implementation of the initiative by providing various professional development workshops and sessions and in collaboration with a team of teachers who volunteered as a pilot group. The EEF partnership was grounded on a professional development model that aimed to help Parnell teaching faculty modify existing assessments, curricula, units, lessons, and overall teaching strategies to reflect new 21st century capacities.

The professional development model created by Teachers College and Parnell District Schools was originally based on the creation of summative assessments jointly created by teachers and TC researchers that acted as catalysts to refine and redesign daily classroom instruction and curricula. The professional development model took on a Design Based Research (see p. 95 for further discussion) approach to allow learning to occur as faculty moved through the process of learning new teaching strategies while simultaneously reflecting on their conceptions of what it means to prepare students for the 21st century by examining the student data that resulted from the assessments.

The highly flexible and dynamic nature of DBR processes forced continuous refinement of methodological procedure and often couldn't be described until the entire

process was complete (Edelson, 2022). DBR offered a way to examine the complex and unique contexts educational settings like Parnell's EEF PD Initiative created. DBR, in essence was an amalgamation of several epistemological characteristics. DBR was cyclical in nature, continuously pushed me as researcher, and the participants as the study adapted and changed in an iterative manner. Similar to formative assessment, the iterative nature of DBR offered me opportunities to genuinely embed research in current context before I moved teachers forward in their experiences. The process of designing while researching, was an opportunity of learning for both me and the teachers. DBR allowed for context dependent interventions to take place and for missteps to be rectified in a timely manner allowing the introduction of new procedures without delay, when needed the most. Also the DBR methodology allowed for the production of Design Products. Design Products are products that were created during the research process. In Parnell's case, one item that was created was a document titled the EEF Matrix. Although many design products were created during the study, I limit my discussion to the EEF Matrix as it provided a foundation for deep discussion on 21st Century skills. The DBR professional development model will be discussed in further detail in Chapter V.

### **Research Framework**

As this research study aimed to provide both macro and micro case studies nested within the context of on another, a conceptual framework guided the research of the implementation of the first phase of professional development while a design product (see Table 8), which emerged from the planning stages of the professional development, acted as an embedded and complementary framework that assisted in guiding the analysis

of my micro-case studies. The overall conceptual framework situated the district-wide professional development initiative within three theories.

First, Bruner's learning theory offered a way of looking at the experiential learning teachers in the study encountered. Second, Bandura's social cognitive theory provided ways for me to understand the self-efficacy behind how teachers learned intrinsically. According to Pajares (2002) people's beliefs about their own abilities directly coincide with their levels of accomplishments in comparison to the amount of knowledge they possessed or type of skills they had. (Pajares, 2002, para. 20). And third, Cochran-Smith and Donnell's teacher research theory provided me a way to interpret and make sense of the multiple identities the participants of this study not only brought with them but also evolved in and out of during and after learning new concepts. The teachers in Parnell School District, CT situated themselves as learners in experiential learning situations, a cycle where they 'Do[Did],' 'Reflect[ed],' 'Make [Made] Abstract Connections,' and 'Test[ed] out what they learned in new situations (Kolb, 1984). Drawing heavily on Dewey and Piaget, Kolb (1984) discusses the experiential learning cycle that can be directly related to how teachers applied what they learned in professional development sessions with students, when they simultaneously identified themselves as learners and teachers. I specifically designed the EEF PD cycle so teachers were always immersed in experiential situations.

As mentioned, an additional framework (design product) naturally emerged from the professional development activities that ensued during the study. As teachers were led through a series of activities focused on generating a common understanding of 'what' 21<sup>st</sup> Century skills were and which skills were most important to Parnell School District,



a design product was created. With teacher input, my research team and I created the EEF Matrix (see Table 10), originally adapted from the Global Capacities Framework (see Figure 15). The EEF Matrix, was a document that outlined twenty 21<sup>st</sup> Century skills that Parnell Schools District, my research team, and I had prioritized as the most important skills of the 21<sup>st</sup> Century. The one page document was meant to act as a menu, created by teachers and, for teachers, of skills they could explicitly teach in their classrooms, one or two at a time. The EEF Matrix was rooted in various 21st century education and critical social theories. Its origin and creation are discussed in detail in Chapter IV. The next section presents the overall conceptual framework as well as provides the research questions.

### **Bruner's Learning Theory (1960)**

Bruner (1960) emphasizes the importance of cultivating constructivist classrooms where teachers engage students to inquire about the world by exploring and manipulating objects in order to fully capitalize on his learning theory of education. Bruner's learning theory was based on the foundation that new ideas and concepts are created based on prior/existing knowledge. This occurs through a specific process: transformation of information, decision making, generating hypotheses, and making meaning from information and experiences. Just as the five step process mentioned above allows individuals to create new ideas, Bruner theorized that the skill of categorizing is a significant event in learning. In order to make sense of what one perceives, Bruner argued that it requires the ability to categorize. In order to conceptualize, that requires the ability to categorize, and Bruner concluded the same sentiment for making decisions and interpreting.

One of Bruner's influential ideas of a spiral curriculum based on an individual's readiness for learning directly relates to the current study. Bruner (1960) argued that, based on an individual's readiness for learning, anyone, at the appropriate stage of development, can be taught by continued practice and repetition of basic ideas and skills, incrementally learning more difficult concepts, until an individual attains a level of mastery.

It was essential to draw on Bruner's theory of learning when providing context and background on the changing and growing perceptions of the participants involved in this study. As teachers became more engrossed, familiar, and knowledgeable with 21st century skills, they began to adapt their daily instruction and engage in reflection and meta-analysis that demonstrated their change in thinking over time and their intrinsic desire to continue teaching. I used Bruner's theory of learning to analyze how teachers progressed in thinking and gaining knowledge throughout the professional development process at Parnell School. I found many parallels to Bruner's (1960) three stages of intellectual development that I drew on to analyze and elaborate those experiences. First, many teachers began in an *enactive* state where they tried to learn through the physicality of learning; second, teachers moved to a stage of iconic learning where they made meaning without physical encounters and based learning only on models and pictures; and finally, teachers engaged in a third stage, the symbolic stage, where they were able to work with abstract concepts and learn in abstract terms. As Bruner's learning theory concretized the various stages of learning development, many of the teachers subconsciously navigated their way throughout this study, and it became apparent that I

needed to heavily consider the self-efficacy that drove many, but not all, of the participants in this study to succeed.

### **Bandura's Social Cognitive Theory (1986)**

Bandura indicated that people's previous experiences and personal beliefs influence their behavior. This was a very important concept to consider during the planning and programming of the professional development initiative. As we discussed possible session/workshop activities, topics for discussion, and other ways we wanted to engage teachers during their professional development experiences, we maintained and always considered the fine balance between challenging new ideas and levels of frustration. This was paramount to cultivating and maintaining researcher-participant relationships and an equilibrium of continuous and productive cycles of learning.

Bandura (1994) posited that one's self-efficacy motivates, assists in making life decisions, and whether or not to "get back on the horse." As I analyzed my participants experiences, it was apparent that every individual's self-efficacy differed. Interestingly, as Bandura discusses, I noticed that the varying levels of self-efficacy I observed in teachers throughout the professional development process and was in no way correlated to individual teachers' actual skill level or ability. Thus, it was possible to have a highly skilled individual with very low self-efficacy never amount to accomplish anything and vice versa.

Bandura argued, however, that an individual's self-efficacy can be cultivated and developed over time. He suggested that, first, if teachers experience success, it could drive them to want to do more, but it is important to steer away from false success that is easily attained. Achieving a level of success where a teacher is motivated enough to try

again is beneficial for a teacher, while too easy success makes it extremely difficult for a teacher to bounce back if they encounter failure, which would result in a teacher giving up or quitting. Secondly, self-efficacy can be nurtured by associating oneself with others who are experiencing success. Through mere observation, a teacher can develop a sense of motivation to achieve success. Third, and most obvious, the encouragement and praise of others develop levels of self-efficacy in teachers. Lastly, teachers' perceptions of their emotional and physical state directly affect their self-efficacy levels. Although these four steps to developing self-efficacy seem common-sense, it was necessary for myself and my researcher assistants to negotiate these territories carefully throughout this study to ensure the well-being and productiveness of all participants involved. At the beginning of the study, my research team and I specifically focused on cultivating trusting relationships as "researcher-participant" to ensure success and paths of least resistance. After those relationships began, it then became apparent that we needed to carefully consider the environmental influences on both teachers and students; the fine balance between success and appropriate levels of challenge; and various modes of communication with teachers and students to honor the different ways of learning we encountered.

### **Cochran-Smith and Donnell's Teacher Research Theory (2006)**

Finally, this research study's conceptual framework drew on Cochran-Smith and Donnell's Teacher Research Theory (2006) to address the multiple identities assumed by both researchers and teachers. Teachers identified as "teachers" (of their students), "learners" (engaging in professional development), and "researchers" (researching the effects of 21st century thinking capacities on their students), and so it was necessary to

situate our understanding of these multiple roles in a theory that was “intimately embedded in practice and in the time frames of teachers’ lives in classrooms” (p. 2). We considered,

in the broadest possible sense to encompass all forms of practitioner inquiry that involve[d] systematic, intentional, and self-critical inquiry about one’s work in K-12, higher education, or continuing education classrooms, schools, programs, and other formal educational settings. This definition includes inquiries that others may refer to as action research, practitioner inquiry, teacher inquiry, teacher or teacher educator self-study, and so on, but does not necessarily include *reflection* or other terms that refer to begin thoughtful about one’s educational work in ways that are not necessarily systematic or intentional. (p. 22)

The theories discussed above played integral roles in building the conceptual framework of this study. These philosophies of learning, self-efficacy, and identity provided an organic and ground-up foundation for the Action Research Study method that was implemented.

### **Research Organization**

Although it is customary for the second chapter to be devoted to an in-depth literature review, I found that reviews of literature were necessary in both Chapters II and VI of my dissertation to provide necessary contextual background for the teacher discussions that would follow. In Chapter II, a review of literature that provides a landscape of professional development models and conditions that inform Chapter V’s analysis of Parnell District’s EEF initiative. It provides historical and current background that

situates teachers' experiences in line with reviewed studies and theories, while giving authentic examples of patterns and trends that require further research, as there remains a gap in the literature. Then, in Chapter VI, a review of frequently emphasized critical discourses in schools is discussed to provide examples of the types of critical knowledge teachers at Parnell may already possess around the institutionalization of schooling and teaching with a critical lens. Following, I provide a discussion on globalization and its impact on world literature to provide context for the conversations that occurred between me and the three English literature teachers. These mini-literature reviews can be found in Appendices A-G. In Chapter III, I explain my Action Research Study methodology and the benefits of qualitative approaches to research. The chapter delves into the types of data collected that I triangulate in my analysis, while chapter IV provides a background overview of Parnell, U.S. and Parnell School District.

In Chapter V, an analysis of Parnell's EEF professional development initiative opens up an examination of the structures that were put in place to help implement the initiative: (a) the initiating events to implement a district-wide initiative, (b) the Global Capacities Framework and its adapted version, EEF Matrix, and (c) a six-step instructional design. In addition, there is an analysis of teachers' perceptions and change in practice described as teachers experienced the structured activities distributed throughout the (a)-(c) professional development structures mentioned above. In Chapter VI, I discuss the emergence of a new discourse that stems from the experiences teachers encounter; various critical social theories; and a re-evaluations of teachers' assumptions and beliefs during and after professional development. The discussion begins with a review of critical discourses frequently found in schools in the U.S. that lays a foundation

to explain the use of critical discourses by teachers at Parnell. Chapter VI also discusses how globalization can change the way teachers understand the teaching of world literature. This discussion supports my analysis of three English teachers' changing perceptions during a world literature unit. Lastly, in Chapter VII, I offer implications of this research study and my conclusions.

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The focus on preparing students for the future has always been a goal of education. Whether during wartime, preparing our young students to be part of military movements, or preparing new immigrants to become 'Americanized', education has always played a role in shaping generations to envision the future and prepare for it socially and academically. Today, we are faced with the same goal of preparing our students for the future, but more specifically for the remainder of the 21<sup>st</sup> Century and all it has in store. Whether we are preparing them academically, socially, technologically, or emotionally, we are preparing them to grow up and go into the unknown world. However, we have to stop and think to ourselves. Who are 'we'. Who are the 'we' that are preparing those students for this unknown future? Although there are many possibilities as to who the 'we' might be, we do know for a fact that there is an entire generation of teachers who have been given the task and entrusted to prepare students for the future. So then the next question is, how do we now those teachers know how to prepare our students for the future? One way to answer this question is to cross your fingers and assume they're doing a good job of preparing our children for the 21<sup>st</sup> Century. Another way is to examine how teachers are going about preparing our students and creating the proper forums to engage in discussion to; share ideas, experiences,

trouble practices, replicate best practices, create new practices, and reflect on how we, as a nation are doing in preparing our children and more importantly our teachers.

This study focuses on ‘how’ teachers will prepare our students for the future by first examining how teachers are prepared to do so. Examining this phenomena is of the utmost importance to educators around the world. By exploring the experiences and perceptions of teachers in Parnell School District as they engaged in the EEf PD initiative, this study sheds light on how teachers become ready to create 21<sup>st</sup> Century assessments; teach 21<sup>st</sup> Century skills; and become 21<sup>st</sup> Century thinkers themselves.



## Chapter II

### A REVIEW OF PROFESSIONAL DEVELOPMENT MODELS AND CONDITIONS

#### **Gaps in the Literature**

At this point in time, I can confidently say that teachers at Parnell School District were self-directed learners as they volunteered to be part of a professional development initiative geared toward cultivating 21st century skills in teachers and students. It was important to acknowledge that the professional development initiative at Parnell School District did not take on an approach that viewed the teaching professional as "deficient so we need to educate you more." Instead, Parnell District invited faculty at Parnell opportunities to engage in continued "lifelong learning" based on their own merit. There was an abundant supply of literature that discussed professional development as developing and directing the professional, but an apparent gap in the literature surrounding professional development as self-directed learning.

In addition, much literature was found on the different components that make up professional development: context, the learners, the facilitators, and external/internal pressures, yet, there needs to be more literature on holistic views of professional development as integrated programs that interweave, context, the learner, the facilitator, and the learning that occurs within them. This study sheds light on self-directed learners and their engagement in professional development and holistic views of professional development's interconnected components of context, learner, and learning. I specifically refer to the teachers in this study as self-directed because a majority of the participants not only self-selected to be part of the professional development initiative, but they had histories of seeking out learning opportunities to improve their skills as teachers or to gain new knowledge in individually specific areas of interest. The faculty of teachers at Parnell Schools were part of a school district that encouraged self-inquiry and inquiry

modes of learning. This in turn pushed teachers to take hold of their curiosity and seek out new learning opportunities independently. Thus, I referred to the teachers as self-directed learners. This review of literature assisted in answering and contextualizing the following research questions:

- (1) *How does a district-wide PD initiative focused on educating students for the 21<sup>st</sup> Century impact teachers' examinations and revisions of assessments, curricula, and instructional activities?*
- (2) *How does a district-wide PD initiative focused on educating students for the 21<sup>st</sup> Century impact three 10<sup>th</sup> Grade English teachers' examinations and revisions of their literature curricula and instructional activities?*
- (3) *What factors influence the ways teachers react to the PD plan implemented in the EEF initiative?*

### **An Overview**

The selection of literature included in this review was directly guided by two principles. First, as the EEF professional development initiative was voluntary and the teachers part of the study self-selected, it was important to focus on *Self-Directed Learners Engaging in Professional Development*. Here, I deliberately chose pieces where highly motivated teachers embarked on professional development/action research projects, highlighting teachers' self-efficacy and the direct correlation to their classrooms/students. The second principle that drove this review revolved around three main components of professional development: the learner, the context, and the learning that occurs, which I refer to as *Professional Development's Interconnected Components*. It was clear that literature surrounding professional development was vast, so vast, in fact, that it created patches of work across so many facets that it proved difficult to find just the right combination of variables. Thus, I limited my choice to examples that included only the "learner, context, and learning" as interconnected components to professional development and not discrete parts. These two guiding principles sorted out

the literature reviewed into three main categories of review: (1) communities of learning, (2) balance between theory and practice, and (3) autonomy and ownership of teachers. The review involved a wide read of selections, but for the purpose of this study, I chose to highlight three or four examples of each category. I drew parallels on the research found on how teachers experienced transformative change and how it affected their conceptual understanding of a topic.

Lastly, a brief overview of 21st century frameworks are included in this review of literature to shed light on the background and foundational pieces that acted as a catalyst to the EEF professional development project. This brief overview provides context around what the teachers of Parnell School District were using in their classrooms and how their thinking and language around teaching and learning changed, or not, after and during the professional development initiative.

### **Communities: Learners, Professionals, and Teacher Researchers**

It is evident now that it takes more than just funding and resources for teachers to successfully engage in, implement, and achieve change in their teaching and learning. Conducive environments with balanced tensions (Loucks-Horsley & Matsumoto's, 1999; Grossman, Wineburg, & Woolworth, 2001) are needed in the professional learning community to push teachers, while simultaneously making them feel safe to take risks (Sparks, 2002; DuFour & DuFour, 2010). We might call it a platform for all perspectives, schemas, and experiences in an attempt to find a consistent understanding and language that will, in turn, help educators interpret the identities they bring with them to teaching and into their classrooms (Trilling & Fadel, 2009; Putnam & Borko, 1999) Successful PD that aims to shift an existing paradigm must include reflection and meta-analysis – this is truly the only way to achieve change in one's thinking, beliefs, and ways of knowing (Swann, 2012; Goodard, Hoy, & Woolfolk Hoy, 2000).

## **Tensions and Balance**

Grossman, Wineburg, and Woolworth (2001) discussed maintaining a fine balance between the “essential tension of teacher community” and the “tension between professional development geared to learning new pedagogical practices” in order to truly deepen teachers’ knowledge of specific subject matter in their disciplines of expertise (p. 10). They claimed these two tensions needed to be in equilibrium in order to achieve and sustain intellectual community in the workplace. However, it was clear that the diverse perspectives a teaching faculty bring to professional development sessions was the number one threat to the very fine balancing act of pursuing intellectual community. Paralleling constructivist thinking, Loucks-Horsley and Matsumoto’s (1999) three-step model aimed to provide opportunities of balanced tension by providing the appropriate resources and platforms for resolve. Their model stated:

- (a) Create sufficient cognitive dissonance to disturb the equilibrium between teachers’ existing beliefs and practices and their experience with content, student learning, and teaching;
- (b) Provide time, context, and support to resolve that dissonance; and
- (c) Ensure that the dissonance-creating and dissonance-resolving activities are connected to teachers’ own students and context.

More often than not, however, environments are never perfect conditions for PD for myriad reasons. When this is the case, we don’t necessarily raise our hands in defeat and profess that “it just can’t be done”; rather, we depend on teachers’ self-efficacy to drive successful PD and change with teaching and learning. Self-efficacy is that intangible drive that makes individuals want to succeed or achieve something. You may call it motivation, but it’s more than that; it’s all of the factors, both external and internal, that create something motivating for an individual. Putnam and Borko (1999) discuss “cognition as situated” and draw on several situative theorists to explore the concept of

social and physical contexts when people learn. Situitive theorists move beyond studying the individual who is learning. Situitive theorists factor in all the interactive systems that the learner engages with, ranging from the "individual as participant, participants interacting with each other as well as with materials and representational systems" (Cobb & Bowers, 1999; Greeno, 1997).

It was clear reading across the literature that many theorists, scholars, administrators, practitioners, and policymakers agreed on one thing—that professional development was the number one key to achieving any sort of systematic change in any business or profession. Kay (2010) exclaimed that public education was at a "tipping point" that required public education to change its balance from traditional schooling to schooling that mattered—schooling “that will better prepare students for the demands of citizenship, college, and careers in the millennium” (p. xiii). Kay posited that the one and only way to achieve "schooling that matters" was through professional development that focused on a clear articulation of student outcomes. He went on to exclaim that professional development was "far and away the most important part of the work" (p. xxv). Student outcomes that clearly led to cultivating students who not only had content knowledge in discrete subjects, but the skills to "negotiate constant change" and the aptitude to "reinvent themselves for new situations" in order to succeed should be the one and only goal. It was the ability to adapt, adjust, change, and continuously learn that made an individual competitive in the 21st century, according to Kay.

Trilling and Fadel (2009) reaffirmed Kay's (2010) top priorities of a successful system-wide transformation through the professional development of new and practicing teachers. It was through professional development that teachers would become “21st Century learners themselves, learning from inquiry, design, and collaborative approaches” (p. 124). Trilling and Fadel provided some common examples from successful professional development programs where teachers autonomously engaged in the development of 21st century teaching and learning that demonstrated the experiential

learning teachers encountered during their changing notions of what teaching and learning could be in the 21st century. These professional development programs had the following in common:

- Teachers learned experientially—concretely engaging in "designing, implementing, managing, assessing learning activities and projects, and observing other teachers' methods and skills."
- Teachers' questions were used as a foundation in concert with relevant and recent research.
- Teachers collaborated with their colleagues and other teachers from schools other than their own.
- Teachers received sustained and intensive support: through modelling, coaching, mentoring, and collectively learning with other teachers and administrators.
- Teachers did not see their professional development as an add-on but rather immersed what they were learning in all aspects of their daily instruction, whole school reform, and transformation goals.

Similarly, Wagner (2010), who is best known for his “seven survival skills,” shared the same sentiments, arguing that the only goal in systemic change was for improved student learning and that the only way to achieve that was through sound professional development. He went on to quote his colleague, Richard Elmore, to explain one of the major downfalls of teaching—the lack of consistency when it came to standards in the teaching profession. Teachers across the nation all had different interpretations of what was "good," "bad," an "A," "B+," "D," or "F," resulting in a profession of inconsistencies. Wagner argued that the first way to improve student learning in this environment was to find a common language to “improve instruction ... [but] first agree on what good teaching is all about” (p. 128). Secondly, educators should talk and reflect—to make the classroom walls transparent.

**One major factor that drives a teacher's self-efficacy is a supportive environment.** As Sparks (2002) reiterated in Chapter VI, the support needed and provided by "communities of practice" or "professional learning communities" is one of the top three reasons teachers are able to persevere and overcome the difficulties inherent when they undergo change in their philosophical beliefs of teaching and learning, their day-to-day instructional practices and previous beliefs/ideologies/concepts. DuFour and DuFour (2010) discussed the importance of Professional Learning Communities (PLCs) that foster collaborative and collective teacher development in the 21st century. They argued that the "traditional quick-fix in-service" for teachers was no longer effective in the 21st century. Rather, PLCs required ongoing collaborative work among colleagues, administrators, and other educators from other schools to promote vertical dialogue and cross-disciplinary dialogue. PLCs aim to achieve deep understanding of topics and hold the success of their students as top priority. At the same time, Putnam and Borko (1999) pushed the idea of Professional Learning Communities slightly further when discussing the nature of learning and "situative perspective," where students and teachers create learning communities that provide opportunities for rich, engaging discussions in order to develop "deep understandings of subject matter" and learning in meaningful contexts where student and teacher learning is situated in authentic spaces. Putnam and Borko affirmed the main goals of education and educators as the pursuit of lifelong intentional learning in our students through authentic activities. They argued that if lifelong learning is the goal, activities must inherently be authentic in order to engage individuals in the type of thinking and complex problem solving skills required not only in school but also out of school.

**A second factor that drives a teacher's self-efficacy is a sense of autonomy.** Schreck (2009) affirmed the importance of teacher empowerment and autonomy as related to systemic change and paradigm shifts in one's thinking. She argued that a teacher's professional judgment surrounding the daily ins and outs of teaching

(curriculum, assessment, instruction, etc.) is what allows a teacher to effectively reach each of his/her students in a creative manner. By implementing prescribed curricula, forcing mandated assessments, and stripping teachers of autonomy in the classroom, teachers are left disenfranchised, unmotivated, and unable to engage in creative teaching and learning.

**A third factor that drives a teacher's self-efficacy is a sense of ownership and responsibility.** Goodard, Hoy, and Woolfolk Hoy (2000) posit that the profound importance of teachers' shared responsibility for students' learning and a collective focus on students drive teacher efficacy and student achievement. Their study demonstrated the correlation between teacher behavior and student achievement, arguing that "when teachers believe they are members of a faculty that is both competent and able to overcome the detrimental effects of the environment, the students in their building have higher achievement scores than students in buildings with lower levels of collective teacher efficacy" (p. 503). As discussed in Sparks (2002), school district leaders have a responsibility to instill a certain culture within the fabric of their system that establishes professional learning and continuous improvement of student achievement and teacher effectiveness. It is their duty to create organizational structures to support these two goals and to "create sustained professional learning and collaboration in schools for the benefit of all students" (p. 6-2).

It is evident that understanding "communities" of practice and attempting to achieve successful professional learning communities hinges largely on teachers' intrinsic self-efficacy. A fine balance between learner, context, and learning is necessary in order to maximize the goals of any professional development program.



### **A Balance Between Theory and Practice: The Philosophical and Practical—Autonomy and Ownership**

In addition, it is important to understand that any successful professional development is deeply rooted in scholarly research. This, however, posed problems at times. Scholarly research has been criticized for being impractical for practicing teachers who are looking for something they can use in their classrooms. At times, in the view of the daily practitioner, research can take a less practical approach to concepts that can be transferred to daily practice, and this can be a deterrent to practitioners who are looking for concrete ideas they can try out as soon as possible. One way of bridging the gap between research and practice was to consider the philosophical tenets that underscored one's beliefs about teaching and learning. This, however, needed to be supported by a system that encouraged teachers to be autonomous, as it was the teachers who reflected on why they teach what they do. Swann (2012), a Popperian philosopher, described the consequences of taking away teacher autonomy and replacing it with "prescribed curricula and mandated instructional activities" to highlight the impact on promoting learning. Swann described five possible outcomes:

**Learnt Dependency.** Swann (2012) argued that once children enter schooling, “self-initiated activity is usually increasingly curtailed rather than cultivated” (p. 117). This occurs because students are taught to succeed in "schooling." Thus, students must abide by the directions and content of planned programs to achieve "learning" set by their teachers. Students are taught and ingrained to be dependent on the system and its players (teachers, administrators, school rules, curriculum, standards). What often occurs is a desensitized student who is disaffected and apathetic—who is then viewed as not independent enough or responsible enough to take charge of his/her own learning. Swann argued that the only way to stop this from happening was through teacher autonomy and student autonomy.

**Marginalization of Student Preferences.** Swann (2012) discussed the manipulation of students' wills and wants when they did not want to engage with prescribed curriculum offered in their classrooms. Teachers attempted to sway students to think that what they were learning was "for their own good" or "for the good of society," resulting in the manipulation or coercion of students rather than doing things *with* students (p. 117). This directly affected the way in which students independently chose what they wanted to learn and how they wanted to engage with learning. Students learned to become dismissive in order to fit the "school"/education system—anything otherwise would be rebellious or a failure to conform to the norms. The only way this could be diverted was for students to engage in student-directed curriculum and student-initiated learning, where students take charge of what they want to learn and teachers and curriculum developers imagine all possibilities.

**Inadequate and Inappropriate Criticism.** When teacher autonomy on what they are able to teach is taken away and students are left with mandated or prescribed curricula, important content pieces can be left out. Although students may become deeply versed in some content areas, the curriculum may give a fairly “naive [view] about crucial aspects of day-to-day living” (Swann, 2012, p. 118). This occurs because teachers who are stripped of their autonomy may leave assumptions students bring to the classroom unexplored and unchallenged, whereas teachers who are autonomous may feel it their duty to uncover the assumptions and judgement students bring with them to school.

**Perpetuation of Negative Values.** Swann (2012) argued that people not only responded to what they were taught and shown but also to what they experienced personally. Thus, if a student was continuously told about the "importance of respect for [others] and the development of learner autonomy," yet they observed otherwise in their own school/classroom and these actions were left unchallenged, students received a

confusing message and eventually just took things for granted when it came to the human condition (p. 118), perpetuating the negative values they observed.

**Loss of Faith in Formal Education.** Swann (2012) argued that the main goal was the "idea of learning for transcendence." Students, however, often experienced boredom and confusion in school when what they were learning misaligned with what they wanted to learn and what they deemed important/applicable to their lives, which Swann referred to as a "steady diet of unwanted answers to unasked questions." In turn, students and teachers lost a certain faith or confidence in the value of formal education (p. 118).

The current study aimed to uncover whether or not changes in teachers' perceptions about teaching for the 21st century occurred and, if so, how, and if at all it affects teachers' practice and the ability to build new assumptions that inadvertently lead to deeper understandings of what they teach. According to Pugh, Linnenbrink-Garcia, Koskey, Steward, and Manzey (2009), there is a direct correlation between deep-level learning and transformative experiences, which they refer to as conceptual change and transfer. Pugh et al. argue that "transformative experience is a form of engagement" (p. 3). They define engagement as an individual's level of involvement and emotional experiences throughout an experience. Pugh et al. continue on in their article to describe the interrelated and interdependent qualities of a transformative experience. They narrow it down to three constructs:

1. *Motivated use*: When teachers apply what they learn in alternate settings that do not necessarily call for the application of their new experiences. This often occurs when teachers apply their knowledge in contexts set outside of school, including their private lives, when they are not mandated to.
2. *Expansion of perception*: When teachers see and understand the world in new or different ways. Often teachers begin to teach differently once they see their curriculum through a different set of eyes and bring a different schema to what they teach.

3. *Experiential value*: When teachers see value in what they learn, seeing what they now know and its immediate uses in everyday life.

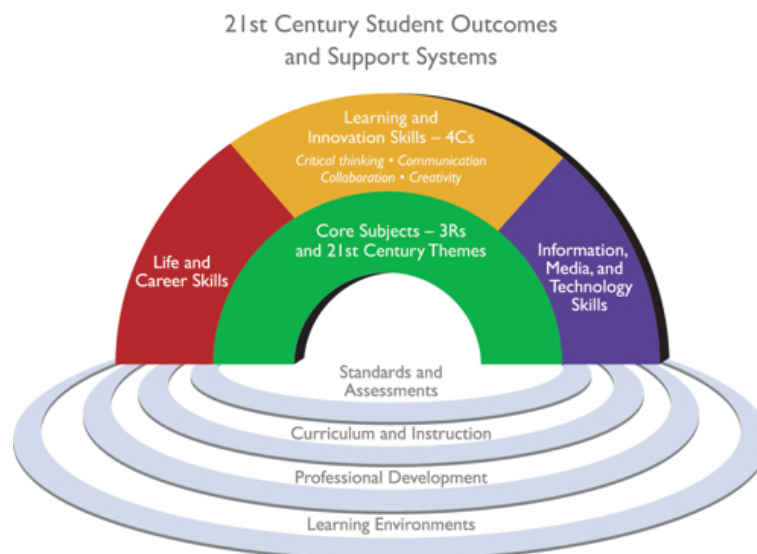
These three constructs offer a way of viewing the engagement levels of the teacher participants in the EEF initiative by providing insight into the transformations of thought teachers experienced. I intentionally observed during and after implementation of the EEF professional development sessions the following: (a) whether teachers engaged their colleagues who were not part of the first phase of professional development differently; (b) whether teachers began to see their curriculum in a new light; and (c) how teaching was affected and whether their sense of ownership in teaching these new 21st century skills changed in any way.

### **21st Century Frameworks**

This next section discusses a specific group of 21st century frameworks that were examined by teachers during the initial phase of the EEF Planning. Notably, the theme of creative thinking is often embedded within the language across various frameworks. It was apparent that words that were used to describe creativity were also being used to describe 21st century education. For example, Schreck (2009) discussed successful methods to cultivate creative educators and drew on the importance of teacher-posed inquiry and current research practices (Trilling & Fadel, 2009). However, Schreck did not refer to this teacher as a "21st century" teacher, but rather a "creative" teacher. It is important to acknowledge that the terms "21st century" and "creative/creativity" are synonymously used by various scholars, researchers, and educational organizations found throughout the literature. In an attempt to uncover creativity from its heavy laden labels of "fluffy, fun, eccentric, extra and fuzzy," Schreck (2009) aimed to inform her reader of these misconceptions by arguing the importance of "serious creativity," a term created by Edward deBono (1988). She argued for a balance between critical and creative thought.

She stated that both vertical (critical) and lateral (creative) thinking were necessary for students to achieve innovation. She explained vertical thinking as attempting to be "right" at all times along a journey, while lateral thinking was achieving "right" at the end and not necessarily throughout the journey. The coexistence of these two ways of thinking was necessary to cultivate the creative student/teacher/individual according to Schreck.

It was not surprising to see multiple frameworks attempt to balance vertical and lateral thinking skills (Schreck, 2009) when aggregating the skills one needed for success in the 21st century. In addition, many frameworks integrated skills that were needed to engage with new literacies. One of the first frameworks to emerge in the United States was created by the Partnership for 21st Century Skills (2001).



*Figure 1. 21st Century Student Outcomes and Support Systems Framework 2001*

Here, the Partnership relied on the concept of how to cultivate 21st century skills by breaking them down into six main categories. (1) Core Subjects, (2) 21st Century Content, (3) Learning and Thinking Skills, (4) ICT literacy, (5) Life Skills, and (6) 21st Century Assessments. As one of the first published, it was evident that this model attempted to address the 21st century individual and all of the skills he/she required in an education environment that balanced hard (cognitive) and soft (non-

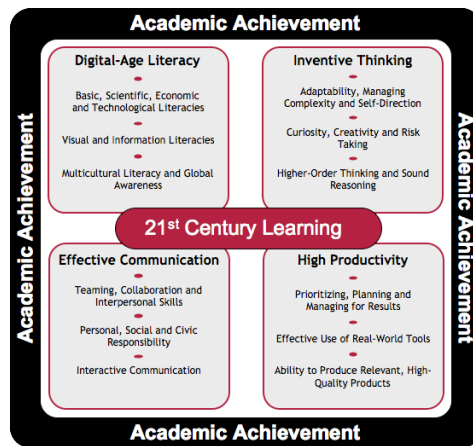
cognitive) skills. The Partnership (2001) framework was the document that finally synthesized and published what educators had been talking about since the mid-late 1990s. The Partnership neatly categorized and packaged the needs of a 21st century learner and provided educators and school leaders a way they could fulfill those needs. They provided an understandable, easy to read, and, most importantly, practitioner-friendly document that brought attention to new types of literacies and possible ways to implement these new literacies and 21st century skills into the classroom. The accessibility of the Partnership's framework bridged a gap from the scholarly material on new literacies and 21st century research that made it relevant and applicable to the daily classroom teacher and school district administrators. The Partnership's framework also shed light on the need for adapted assessments specifically for the 21st century. It acted as a catalyst to school systems across the United States calling for educators to revise or create new curriculum, assessments, and educational philosophies in an attempt to drive systemic change toward a more 21st century education.

The first two categories bridge "traditional" content knowledge and "21st century knowledge." Taking into consideration that practitioners were their largest audience, it was in the Partnership's (2001) best interest to maintain familiarity for teachers in order for them to see the usefulness of the framework. This was evident in the emphasis for a continued focus on the "3 R's," while new 21st century content would thematically interweave itself through the regular curriculum. Twenty-first century content was not given direct focus in this framework but was highlighted as something important that should be taught along with traditional curricula. By 2001, various debates on digital immigrants and digital natives (Prensky, 2001) had surfaced, and the New London Group's (1996) seminal article on new/multi-literacies was already five years old. Various scholars and educators began to contribute to the field of digital/multi/new literacies (Greenhow; 2009; Seiter, 2007; Jenkins, 2007; New London Group, 1996), and education standards were beginning to reflect the need for multi-literacies in curricula

across the United States. And so, it was not surprising to see the fourth category of the Partnership framework integrate information, media, and technology literacies to address the changing needs of students and teachers.

The third and fifth categories bridged the need for hard and soft skills and the connection of education to a student's life after they graduated. By bringing attention to both the cognitive and non-cognitive skills required by students, it placed value on skills that were not traditionally scored in school settings or considered too subjective to score. Making a specific category for these skills opened up opportunities for educators and scholars to look at skills like perseverance, motivation, and resilience and what role they played in the 21st century. It also opened up opportunities for teachers to consider students in a more holistic way and not solely based on their cognitive skills. This also directly impacted the underlying inclusive nature of 21st century frameworks. By addressing both non-cognitive and cognitive skills, it provided multiple entry points for students to demonstrate their learning processes. Not long after the Partnership's framework was introduced, education-related consultancy companies and associations across the United States caught on to the demand for anything 21st century-focused. From 2001 forward, various programs, frameworks, professional development initiatives, and research devoted to 21st century skills and how to educate in the 21st century flourished across the education field.

In 2003, En Gauge created a framework based on information literacy.



*Figure 2. En Gauge 21st Century Learning Framework 2003*

Similar to the Partnership's framework, En Gauge provided four categories that focused on the integration of digital literacies, how to communicate effectively using these new literacies, and the various thinking skills that would help individuals be highly productive in the 21st century. This was also a first framework that included a wider notion of literacy that included "visual literacy" and the importance of curiosity and risk taking. There seemed to be a greater detachment from traditional or familiar teaching/education themes in the En Gauge framework. Unlike Partnership, where practitioners could clearly see the connection to traditional schooling (3R's and 21st century themes) and how the 21st century embedded within those traditions, En Gauge took a more forward approach to laying out their framework detached from more traditional schooling terms.

In 2005, the Organisation for Economic Cooperation and Development (OECD) published three competency categories for students in the 21st century. Seventy-five percent of their conceptual framework focused on character and personality traits. Emphasizing the importance of collaboration and autonomy, OECD made it clear that in the 21st century, individuals needed cognitive skills but, more importantly, affective/inter/intra-social skills.



<p align="center"><b>Organization for Economic Cooperation and Development</b></p> <p><b>Competency Category 1: Using Tools Interactively</b></p> <p>A. Use language, symbols and texts interactively</p> <p>B. Use knowledge and information interactively</p> <p>C. Use technology interactively</p> <p><b>Competency Category 2: Interacting in Heterogeneous Groups</b></p> <p>A. Relate well to others</p> <p>B. Co-operate, work in teams</p> <p>C. Manage and resolve conflicts</p> <p><b>Competency Category 3: Acting Autonomously</b></p> <p>A. Act within the big picture</p> <p>B. Form and conduct life plans and personal projects</p> <p>C. Defend and assert rights, interests, limits and needs.</p>
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*Figure 3. Organisation for Economic Cooperation and Development Competency Categories 2005*

Similarly, the assumption of collaborative work and heterogenous groups found in OECD's three competency skills are also present in Dede's (2009) Neomillennial Learning Styles. While Dede's contextual framework focuses on media literacy/digital literacy, he emphasizes teachers' roles as facilitators by discussing the need for "co-designing" learning experiences for students. Dede's framework touches on the changing roles of traditional student/teacher relationships for the 21st century.

<p align="center"><b>Dede's Neomillennial Learning Styles</b></p> <p><i>Fluency in multiple media</i>, valuing each for the types of communication, activities, experiences, and expressions it empowers.</p> <p><i>Active learning based on collectively seeking, sieving, and synthesizing experiences</i>, rather than individually locating and absorbing information from some single best source.</p> <p><i>Expression through non-linear, associational webs of representations</i> as well linear media (e.g., authoring a simulation and a webpage to express understanding, in contrast to writing a paper).</p> <p><i>Co-design by teachers and students</i> of learning experiences personalized to individual needs and preferences.</p>
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*Figure 4. Dede's Neomillennial Learning Styles 2005*

Then in 2006, Henry Jenkins published one of the most widely spread white papers from MIT's McArthur Foundation, "Confronting the Challenges of Participatory Culture: Media Education for the 21st Century."

**Play** — the capacity to experiment with one's surroundings as a form of problem-solving

**Performance** — the ability to adopt alternative identities for the purpose of improvisation and discovery

**Simulation** — the ability to interpret and construct dynamic models of real-world processes

**Appropriation** — the ability to meaningfully sample and remix media content

**Multitasking** — the ability to scan one's environment and shift focus as needed to salient details.

**Distributed Cognition** — the ability to interact meaningfully with tools that expand mental capacities

**Collective Intelligence** — the ability to pool knowledge and compare notes with others toward a common goal

**Judgment** — the ability to evaluate the reliability and credibility of different information sources

**Transmedia Navigation** — the ability to follow the flow of stories and information across multiple modalities

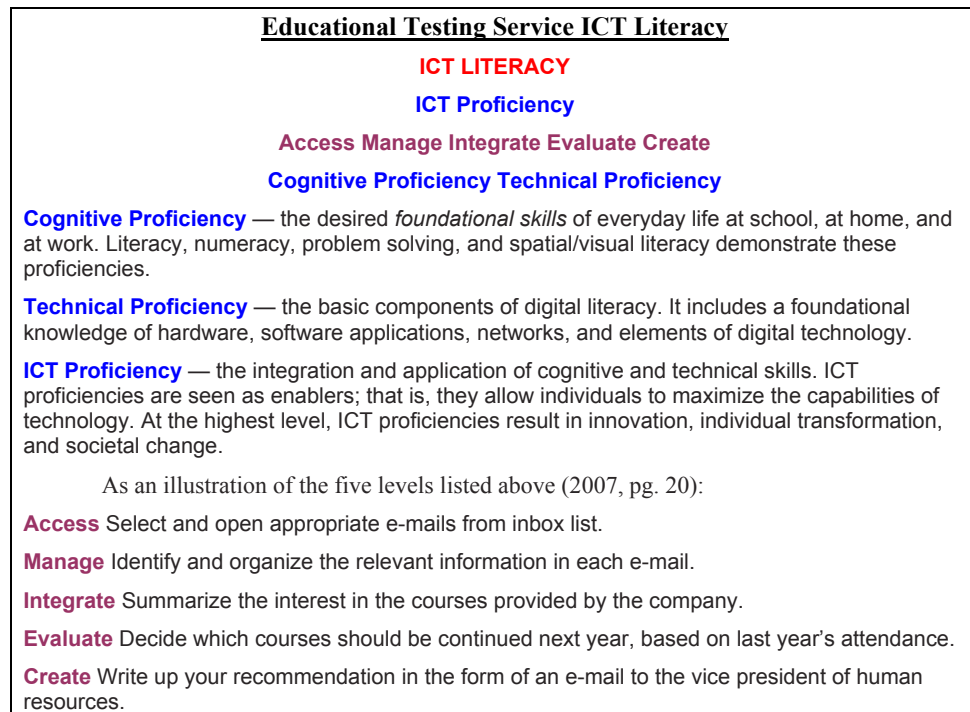
**Networking** — the ability to search for, synthesize, and disseminate information

**Negotiation** — the ability to travel across diverse communities, discerning and respecting multiple perspectives, and grasping and following alternative norms.

*Figure 5. Confronting the Challenge of Participatory Culture: Media Education for the 21st Century*

This paper was based solely on a list of digital literacies required of competitive participants in the 21st century. Here, Jenkins concentrated on eleven skills and dispositions required when engaging with Information Communication Technologies rather than focusing on people's proficient use of particular tools. Jenkins's list of skills in combination with several re-definitions of teaching and learning in a digital age was one of various reasons a review of existing definitions of critical and creative thinking was called for. He offered definitions for the very skills educators were highlighting as deficient in. As teachers and parents were labeled "digital immigrants" and students "digital natives" ((Prensky, 2001), Jenkins provided a synthesized list of the skills students were using but teachers were not. Most importantly, Jenkins's paper shed light on the fact that many schools were not providing appropriate platforms for facilitating or encouraging these new 21st century skills. Moreover, this white paper highlighted the difference between viewing Web 2.0 as a set of tools or a mindset (Gee, 1996, 2003; Hull & Nelson, 2005; Jenkins, et al., 2006; Kress, 1997; Mahiri, 2004; Siegel, 2006, 2008).

The Educational Testing Service ICT Literacy framework focused strictly on the digital skills required for the 21st century. Although this list did not highlight learning or thinking skills, it attempted to highlight the difference between Web 2.0 as a set of tools or a mindset. By differentiating "technical proficiency" and "ICT proficiency," it compared the



*Figure 6. Educational Testing Service ICT Literacy Framework*

use of digital tools as hardware vs. the application of hardware in meaningful situations/ scenarios. The ETS ICT literacy framework brings awareness to the insufficiency of technical proficiency and the need for ICT proficiency in the 21st century.

Following in 2007, the American Association of Colleges and Universities, and the International Society for Technology in Education revised their existing frameworks for higher education graduates.

## **THE ESSENTIAL LEARNING OUTCOMES**

Beginning in school, and continuing at successively higher levels across their college studies, students should prepare for twenty-first-century challenges by gaining:

### **KNOWLEDGE OF HUMAN CULTURES AND THE PHYSICAL AND NATURAL WORLD**

- Through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts

Focused by engagement with big questions, both contemporary and enduring

### **INTELLECTUAL AND PRACTICAL SKILLS, INCLUDING**

- Inquiry and analysis
- Critical and creative thinking
- Written and oral communication
- Quantitative literacy
- Information literacy
- Teamwork and problem solving

Practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance

### **PERSONAL AND SOCIAL RESPONSIBILITY, INCLUDING**

- Civic knowledge and engagement—local and global
- Intercultural knowledge and competence
- Ethical reasoning and action
- Foundations and skills for lifelong learning

Anchored through active involvement with diverse communities and real-world challenges

### **INTEGRATIVE LEARNING, INCLUDING**

- Synthesis and advanced accomplishment across general and specialized studies

Demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems

*Figure 7. American Association of Colleges and Universities Essential Learning Outcomes for the 21st Century (2007)*

## 1. Creativity and Innovation

Students demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology.

- a. Apply existing knowledge to generate new ideas, products, or processes
- b. Create original works as a means of personal or group expression
- c. Use models and simulations to explore complex systems and issues
- d. Identify trends and forecast possibilities

## 2. Communication and Collaboration

Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.

- a. Interact, collaborate, and publish with peers, experts, or others employing a variety of digital environments and media
- b. Communicate information and ideas effectively to multiple audiences using a variety of media and formats
- c. Develop cultural understanding and global awareness by engaging with learners of other cultures
- d. Contribute to project teams to produce original works or solve problems

## 3. Research and Information Fluency

Students apply digital tools to gather, evaluate, and use information.

- e. Plan strategies to guide inquiry
- f. Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media
- g. Evaluate and select information sources and digital tools based on the appropriateness to specific tasks
- h. Process data and report results

## 4. Critical Thinking, Problem Solving, and Decision Making

Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources.

- e. Identify and define authentic problems and significant questions for investigation
- f. Plan and manage activities to develop a solution or complete a project
- g. Collect and analyze data to identify solutions and/or make informed decisions
- h. Use multiple processes and diverse perspectives to explore alternative solutions

## 5. Digital Citizenship

Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.

- i. Advocate and practice safe, legal, and responsible use of information and technology
- j. Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity
- k. Demonstrate personal responsibility for lifelong learning
- l. Exhibit leadership for digital citizenship

## 6. Technology Operations and Concepts

Students demonstrate a sound understanding of technology concepts, systems, and operations.

- i. Understand and use technology systems
- j. Select and use applications effectively and productively
- k. Troubleshoot systems and applications
- l. Transfer current knowledge to learning of new technologies

*Figure 8. International Society for Technology in Education Graduate Student Outcomes (2007)*

Integrating more 21st century skills, both organizations expanded their frameworks by adding a more detailed outline required of higher education graduates in digital literacy and analytic life skills. Although both lists demonstrate a need for various skills,

a common need is perceived for digital awareness, collaboration, and experiential learning, whether across disciplines or across cultures, as important skills for succeeding in the 21st century.

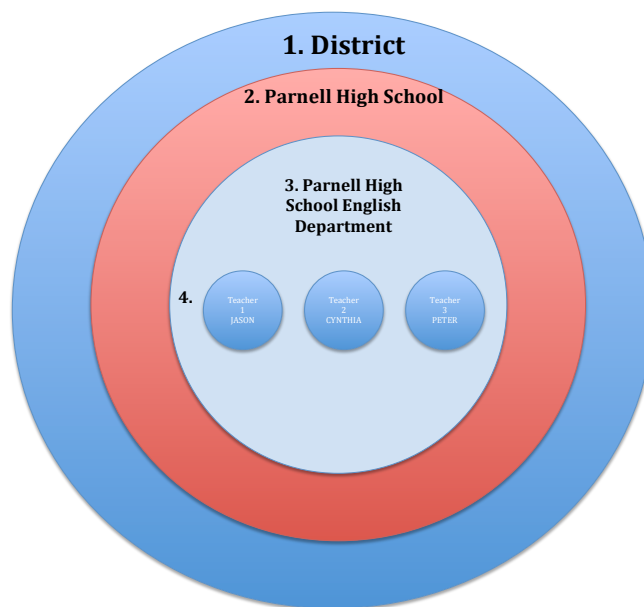
In addition, as 21st century frameworks continue to be created and education systems change their teaching and learning goals to reflect more collaborative, digital, and creative learning opportunities for students, assessments that can assess 21st century skills are also being created to fill this need. Widely recognized on an international level, the Programme for International Student Assessment (PISA) has been a leading example of assessing 21st century skills. In the United States, the College Work and Readiness Assessment (CWRA) has also gained popularity in education circles as an innovative and interactive tool for measuring 21st century skills. Several other testing companies (ETS, Pearson) also continue to create assessments that address the changing needs of schools.

### Chapter III

#### METHODOLOGY: MACRO AND MICRO ACTION RESEARCH STUDY

##### **Four Level Overview: District, School, Department, and Teachers**

This Action Research Study describes three tenth grade English teachers' experiences embedded within a district-wide professional development initiative called EEF, and teacher perceptions of "how to prepare/educate students for the 21st century." Although the Action Research Study will essentially provide an ethnographic account of the three teachers' perceptions before, during, and after the district-wide professional development (PD), it is impossible to properly or adequately contextualize their professional development/classroom experiences without detailed understanding of the department they teach in, inevitably situated in a high school located in a larger district. In order to provide readers with enough context and a deep explanation of the PD these three teachers engaged in, as it directly correlates and impacts the teachers' perceptions examined in this study, it is necessary to give an overview of the four levels of context that are nested one within the other: (1) district, (2) school, (3) department, and (4) teachers in the classroom. These overviews will provide background and contextual information that will act as a foundation for a thorough examination/analysis of the three teachers' experiences.



*Figure 9. Four Concentric Levels: Honing in on a Smaller Slice of the Larger Study*

## **Research Approach**

### **Choosing a Qualitative Approach**

Taking a qualitative approach to this study offered an overview of how the issues of integrating 21st century skills through professional development at Parnell Schools affected the way in which teachers conceptualized the teaching of literature. Knowing and understanding the state of education, in terms of 21<sup>st</sup> Century skills and the state of alarm due to international test scores, was key to implementing change successfully. Without knowing the current state of education in relation to why Parnell School District was engaging in a district-wide PD initiative, students and teachers would've been left confused which inevitably would've resulted in inconsistency and ineffectiveness (Reimer, 1996).

A qualitative approach provided opportunities to observe participants in natural settings where they were authentically experiencing the issue of how to create 21<sup>st</sup> Century assessments to drive their daily instructional practices. It also opened up the possibilities to multiple sources of data that in turn provided a richer, more



comprehensive picture of the phenomena being researched (Creswell, 2010). I used interviews, student/teacher documents, PD session evaluations, emails/reflections, transcribed discussions and classroom observations, to help describe context and to act as foundational pieces to my analysis in Chapter V. It afforded me the ability to use a organic approach to understanding how the professional development at Parnell School District caused teachers to reconsider, or not, the ways they conceived the teaching of literature. In addition, a qualitative approach allowed for the participants to make meaning throughout the process so that meaning was not imposed on teachers by external influences. Finally, the multiple perspectives that can be garnered from a qualitative study offer greater context and understanding of the various factors that played a role in the transformation or lack of transformation in teachers' conceptions of teaching literature. By utilizing a qualitative approach to this study, it offered my readers first-hand narratives of teachers as they went through professional development on 21st century education.

### **An Action Research Study and What It Has to Offer**

This study used an Action Research Study approach that provided both a macro-ethnography of the district's broader PD initiative (1) district, (2) school, (3) department) and a micro-ethnography of (4) three teachers' experiences within that PD initiative. An Action Research Study approach allowed me to look at individual subjects deeply while simultaneously examining the larger context of the EEF initiative at Parnell Schools. By carrying out a Action Research Study on each of my participants, I was able to hone in on the nuanced details of each teacher's experience that may or may not have changed their ways of thinking about teaching literature in a more 21st century way.

As Dyson and Genishi (2005) posit, "the 'casing phase' offers [offered me] the researcher, the luxury of looking through her own lens, which is open to her interests,

predilections, and particular skills. At the same time she works to keep the lens clear enough so the questions she begins to formulate are relevant to the site” (p. 38). The Action Research Study opened the possibility to ask questions that created a platform for participants to culture-share (Creswell, 2010) their experiences and understandings, offering the richness of the multiple perspectives found in a school.

## **Research Design and Data Collected**

### **Research Questions**

- (1) How does a district-wide PD initiative focused on educating students for the 21<sup>st</sup> Century impact teachers’ examinations and revisions of assessments, curricula, and instructional activities?
- (2) How does a district-wide PD initiative focused on educating students for the 21<sup>st</sup> Century impact three 10<sup>th</sup> Grade English teachers’ examinations and revisions of their literature curricula and instructional activities?
- (3) What factors influence the ways teachers react to the PD plan implemented in the EEF initiative?

This study documents the development of a PD initiative that investigates what students need in order to be competitive citizens in a global 21<sup>st</sup> Century economy. In addition, this study documents the experiences of various teachers that engage in the EEF PD initiative that is intended to help teachers think about the skills students and they themselves, as educators will need for the 21<sup>st</sup> Century. Lastly, the study examines the various conditions that impact the success of the EEF PD initiative.

The partnership between Teachers College and Parnell School District to implement the EEF PD initiative began in January 2010 and will continue to August

2013. This study is a long term study (3+years) and will cultivate more data in the coming years that will provide additional context to the research. This study, however, examines the experiences/data of teachers within the context of the PD initiative from September 2011-August 2012.



*Figure 10. Phases of the EEF PD Initiative*

In order to triangulate the findings, three types of data were collected, examined, and analyzed:

1. Classroom/PD Session observations: Researcher observation/anecdotal notes and audio recordings of discussions.
2. Semi-structured interviews: Audio recorded and transcribed.
3. Documents created by teachers during the PD sessions for their daily instruction: Collected and annotated.

In addition, all PD sessions were audio-taped so any discussions that ensued at these sessions or informally during planning sessions were transcribed and used to provide context during the analysis.

*Table 1. Alignment of Research Questions, Data Collection and Methods*

Research Question	Literature Review	Data	Methods
(1) How does a district-wide PD initiative focused on educating students for the 21 <sup>st</sup> Century impact teachers' examinations and revisions of assessments, curricula, and instructional activities?	<ul style="list-style-type: none"> <li>• 21<sup>st</sup> Century Frameworks</li> <li>• Lit on Communities of Learning; balance between theory and practice; autonomy and ownership of teachers</li> </ul>	<ul style="list-style-type: none"> <li>• Curriculum Artifacts</li> <li>• Lesson plans and Classroom Artifacts</li> <li>• Summative and Formative Assessments</li> <li>• PD Session Observation Transcripts</li> <li>• Classroom Observations</li> <li>• Emails/Ning Discussions</li> <li>• PD Session Evaluations (surveys)</li> <li>• Teacher Reflections</li> </ul>	<ul style="list-style-type: none"> <li>• Artifact Study: curriculum materials, lesson plans, classroom artifacts</li> <li>• Semi-Structured Interviews</li> <li>• Focus Group Interviews</li> </ul>
(2) How does a district-wide PD initiative focused on educating students for the 21 <sup>st</sup> Century impact three 10 <sup>th</sup> Grade English teachers' examinations and revisions of their literature curricula and instructional activities?	<ul style="list-style-type: none"> <li>• 21<sup>st</sup> Century Frameworks</li> <li>• Lit on Communities of Learning; balance between theory and practice</li> <li>• Global education</li> <li>• Globalization and world literature</li> <li>• Debates on world literature</li> <li>• Critical discourses found in US schools</li> </ul>	<ul style="list-style-type: none"> <li>• Lesson plans and Classroom Artifacts</li> <li>• Summative and Formative Assessments</li> <li>• PD Session Observation Transcripts</li> <li>• Classroom Observations</li> <li>• Ning Discussions</li> <li>• Teacher Reflections</li> </ul>	<ul style="list-style-type: none"> <li>• Artifact Study: curriculum materials, lesson plans, classroom artifacts</li> <li>• Semi-Structured Interviews</li> <li>• Focus Group Interviews</li> </ul>
(3) What factors influence the ways teachers react to the PD plan implemented in the EEF initiative?	<ul style="list-style-type: none"> <li>• 21<sup>st</sup> Century Frameworks</li> <li>• Lit on Communities of Learning</li> <li>• Lit on effective professional development conditions</li> </ul>	<ul style="list-style-type: none"> <li>• Curriculum Artifacts</li> <li>• Lesson plans and Classroom Artifacts</li> <li>• Summative and Formative Assessments</li> <li>• PD Session Observation Transcripts</li> <li>• Classroom Observations</li> <li>• Emails/Ning Discussions</li> <li>• PD Session Evaluations (surveys)</li> <li>• Teacher Reflections</li> </ul>	<ul style="list-style-type: none"> <li>• Semi-Structured Interviews</li> <li>• Focus Group Interviews</li> <li>• Surveys</li> </ul>

### **Classroom and PD Session Observations: Macro Analysis**

Throughout the EEF PD initiative, I visited teachers' classrooms in 1<sup>st</sup>, 2<sup>nd</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade, in Math, English, Social Studies, Science, the Arts, and World Languages. During class time, I observed teachers ranging from as few as once up to six times in their classrooms. During those observations, I recorded field notes and audio taped the class session that was then transcribed. In addition, I audio taped all PD sessions that I either facilitated or attended. During those PD sessions, there were four to eleven teachers per session. Those were also transcribed.

### **Classroom Observations: Micro Analysis**

Pseudonyms will be used throughout this study. Jason, Peter, and Cynthia were observed ten times each from September 2011 to June 2012 by curriculum instructional leader Florence for routine classroom checks as part of her CIL duties. I was present in four of Jason's lessons to videotape them. Another two lessons were videotaped by Florence and I reviewed them afterwards. I audiotaped and observed Peter and Cynthia four times. Florence observed them an additional six times over the course of the year. Any observations where I was not present were discussed with Florence, the CIL, while I took notes and discussed her interpretations of what was going on in their class. During my four visits, Jason, Peter, and Cynthia were asked to showcase one lesson, of their choice, they perceived to demonstrate 21st century teaching and learning. Each observation was 56 minutes in length (one period). All audiotapes and field notes were then transcribed. The observations focused on both the teacher and students. The observations tried to capture the verbal interactions via types of questions asked by the teacher/students; the formal or informal nature of dialogue between teacher/student; and the communication/interaction between students when working in small groups. By intentionally focusing on these types of interactions, I could examine the ways in which

the three teachers were attempting to elicit a more 21st century way of thinking from their students and how they provided their students with opportunities to engage with 21st century thinking skills. It was also necessary to review the videotapes and observation notes for any non-verbal cues that might impact how teachers predisposed their students to perceive the 21st century skills they were trying to explicitly teach. As the study progressed, it was interesting to see teachers' sense of humor or sarcastic remarks about certain ideas and the direct impact on how students then perceived those ideas (please see Appendix B for example).

Different in the case of each of the three teachers observed, the observations unavoidably acted as a foundation for their personal perceptions toward the EEF PD initiative and move toward a more 21st century education. Varying from resisting to fully on board, these personal biases were reconciled by triangulating multiple sources of data, resulting in a cross-case analysis of the data collected.

### **Informal Interviews: Macro Analysis**

During the PD initiative, I audiotaped all PD sessions and classroom observations I attended or facilitated. However, at times, it was necessary for me to probe teachers further during small group discussions, independent work time, or in large group discussions for clarification, additional information, opinions, or to investigate a concept further. During this time, I engaged in one-to-one conversation with various teachers, and ultimately asked informal interview questions that were recorded and transcribed.

### **Semi-Structured Interviews: Micro Analysis**

During the ten months I was able to work with the Jason, Peter, and Cynthia through, semi-structured interviews administered at the beginning, middle, and end of the study. As Bernard (2006) states, structured interviews “control the input that triggers

people's responses so that their output can be reliably compared" (p. 251). During the three 30-minute interviews, questions aimed to uncover their perceptions about their daily instruction, the meaning of performance assessment, and the needs of a 21st century student and teacher.

Jason, Peter, and Cynthia discussed how they felt about the PD initiative, their daily teaching duties, the kinds of thinking strategies valued in their classes and the evolution or not, and their individual philosophies of teaching and learning through 21st century skills. In particular, they were asked to share their experiences during PD and the impact it was having on their daily classroom routines. In addition, they were asked to share their examples of exemplary 21st century thinking taking place among students and opportunities being provided by teachers/themselves. They responded to prompts/questions created by the researcher based on field observations and discussions captured on tape during the PD sessions/small group meetings held outside the PD sessions. They discussed:

- unanswered questions they had from previous PD sessions
- clarifying questions to ensure understanding and consistent interpretation
- disagreements with ideas that were presented during the PD sessions and/or small group discussions
- goals to try new ideas they were inspired by during the PD sessions
- logistics and at times eliciting my assistance in mediating discussions with administrators
- how they and their practice were beginning to change, or not; and finally:
- how their students were changing, or not, as a result of their new teaching strategies.

Jason, Peter, and Cynthia also described their perceptions and emotions throughout the interviews to provide the fullest picture of their experiences. Florence, the CIL, and two other teachers in the English Department were also interviewed once. These interviews,

20-25 minutes in length, were audiotaped and transcribed. These interviews provided additional context and also provided examples that could support Jason, Peter and Cynthia's perceptions. Below I describe the data collected and used in the analysis of my study. It is important to note that data was collected from forty teachers across the district including from the three English teachers I focus on in the micro- analysis portion. In addition, data were collected from the assistant superintendent over the duration of our work together that came in the form of emails, recorded phone conversations, audio taped luncheon meetings, Board of Education Meetings, and documents he circulated to his staff via email (articles, narratives, newspaper PDF's, teacher evaluation templates, book chapters).

### **Documents Created by Teachers: Macro and Micro Analysis**

A variety of curriculum artifacts, lesson plans, homework assignments, in-class work, tests/assessments, online NING discussions, meeting transcriptions, e-mails, and artifact reflection discussion transcriptions were collected to see how the research subjects planned, collaborated, and provided opportunities for their students. These documents directly stemmed from the professional development activities teachers engaged in creating/adapting during PD sessions. The online NING Discussions took place several times a week for a duration of 10 months (Sept-June) and one unit's worth of curriculum artifacts was analyzed. That is approximately 4 lesson plans, 2 months worth of online homework outlines (including assignments), and four class sessions worth of in-class work by way of handouts. In addition, 10 meeting transcripts, 25 emails, and 3 artifact reflection transcripts were analyzed for this study.

In addition, I continued to cultivate informal relationships with Jason, Peter, and Cynthia and could inquire (via the water cooler and lunchroom) about each of their involvement or attitudes toward the PD initiative after it was complete. This information



offered additional insight to many of the earlier findings in this study and provided more avenues to discuss how their perceptions changed or did not change due to the PD initiative.

### **Focus Groups and Surveys: Macro and Micro Analysis**

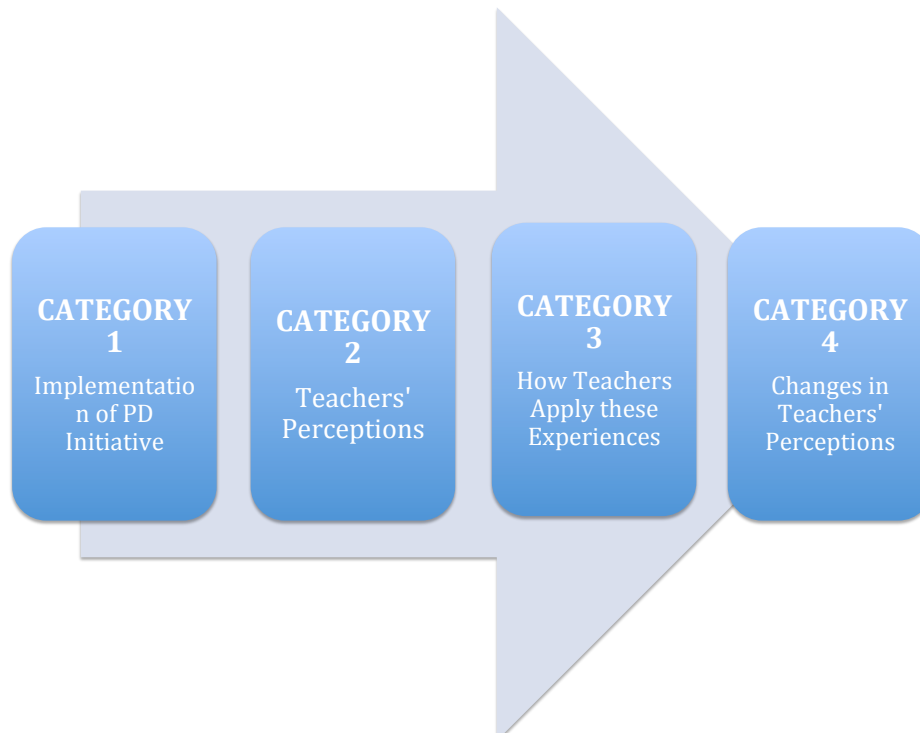
Teachers also took part in focus groups throughout the study. Often at the end of units, teachers from various grade levels and disciplines were interviewed together informally by the assistant superintendent. He asked them to reflect on the work they engaged in and provide feedback and recommendations on how to improve the PD experiences. During these focus groups, I was invited to attend and was given permission to record the sessions. Lastly at the end of six PD sessions, teachers were given short surveys to rate their experiences and provide feedback on how we could improve. The surveys also asked participants questions that would provide some insight on how and why they were part of the PD sessions they were attending. They were based on a scale of 1-5 (1 being the least, and 5 being the highest) when they were rating and the options 'yes', 'no' or 'maybe' were given when they were asked direct questions.

### **Grounding Analysis in the Conceptual Framework: Finding Validity**

All phases of the data analysis were grounded in my conceptual framework. For example, I intentionally looked for indicators that the PD goals were impacting the three teachers' perceptions by searching the motivational (self-efficacy) mechanisms that encouraged teachers to try again or give up, as discussed in Bandura's Social Cognitive Theory (1986), learning patterns, and emerging discourse of the three teachers from beginning to end of the professional development initiative. The conceptual framework proved to be most helpful as I sorted and analyzed data according to the theories of "what makes good professional development," various learning theories, and multiple interpretations of what 21st century education is. In addition, I tried to create new theory

in terms of the emerging discourse and concept I describe as 21st century critical discourse. Bruner's Learning Theory (1960) that discusses the repetitive nature of learning in a spiral curriculum, was helpful in describing and elaborating on the transformative experiences that led teachers to demonstrate effects in their thinking, teaching, and reflection practices over time.

To ensure validity, I examined each piece of data multiple times looking for patterns and evidence of: learning, changes in perceptions, emerging critical 21st century discourse, and positive/negative impacts directly related to the professional development teachers experienced. It was also necessary to examine the external contextual factors that molded teachers' perceptions. The data were interpreted and organized into categories and new ideas. The results were then grouped by themes, which then allowed for a deeper examination of the findings based on the themes criterion. These themes created a sequence, providing a foundation to explain the three teachers' experiences that hindered or enabled them to engage in 21st century critical discourse. The themes also helped patterns and outliers emerge throughout my analysis.



*Figure 11. Four Important Themes*

My analysis surfaced the following categories of importance: (Category1) Implementation of the EEF Initiative; (Category 2) Teachers' perceptions of a 21st century PD initiative and the experiences and opportunities that promote 21st century thinking and learning; (Category 3) How teachers applied these experiences and opportunities to their own teaching and educational philosophies; (Category 4) The changes in teachers' perceptions as a result of these experiences and opportunities.

These categories in turn lead the Findings discussion in the following section of Chapter IV of this study.

### **Researcher Positionality and Areas of Subjectivity**

During data collection and throughout the duration of the PD initiative, it was, and continues to be, necessary to acknowledge my relationship with Parnell School District as an external professional development provider for many of the teachers in the school

district. Often a facilitator, mediator at times, and most often someone who is disseminating abstract knowledge to practitioners upon the request of the Superintendent and Assistant Superintendent of the district, it impacted the way in which teachers viewed me as an external member of Parnell School District and how they attempted to invite me into their personal world of day-to-day teaching. My affiliation with Teachers College, Columbia University played a role with practitioners when I engaged with them, at times creating a student/teacher-type relationship when immersed in a PD session, and then a more informal friendly-type relationship when at the water cooler. I acknowledge the possible influences I may have had on teachers as someone who was encouraging them to implement a way of thinking and teaching because it was a district initiative.

I'd like to recognize the remarkable power of influence a respected and thoughtful educational leader can have on practitioners. I acknowledge that my association to the assistant superintendent, Ted Scots, by association placed me in a category where teachers in Parnell School District might have considered me to have similar traits to Ted Scots. Although I was not necessarily at the forefront of the PD Initiative as Ted was, I was the lead PD facilitator and researcher. I emulated many similar traits to Ted (patience, listening to teachers, relating to problems teachers were experiencing, offering new ways of thinking and imagining, providing scaffolding then gradually releasing responsibility, relating to teachers on a personal level) that many teachers seemed to feel comfortable on a personal level with me throughout the PD initiative. In addition, this made it easier for me to bring in new information and ideas to disseminate to the teachers. This leads into a brief explanation of what I mean by 'organic approach' in chapter III. Although I refer to the methodology of my approach as 'organic' to explain my intention not to impose ideas on teachers as an external facilitator, it is necessary to acknowledge that I was hired by the school district to provide a specific set of knowledge and PD to teachers. I did so with an 'organic approach' by not telling teachers, or making teachers memorize concepts, rather, I used Socratic questioning, teacher inquiry,

and reflection to guide teachers to a previously thought-out concept. Although my goals were pre-mediated and the knowledge I was sharing with teachers was intentional, it was done in a way where teachers were supposed to own the information as their own and feel they uncovered new knowledge through their own inquiry. This did occur with some teachers and not with others.

My past experiences as an elementary educator for 5 years and a secondary educator for 2 years across multiple disciplines in the humanities and fine arts provided me invaluable insight into the daily world of a classroom teacher. It also provided me with knowledge on how professional development experiences impacted teachers positively, negatively, or not at all. In addition, my past experiences as a teacher heightened my awareness to the fact that I assumed all practitioners would be concerned about the same issues within a district if a new initiative was being implemented.

I also assumed that a majority of teachers would jump on the bandwagon of implementing a more 21st century way of thinking and learning. This must be acknowledged, as it directly informed my bias in implementing 21st century skills, considering them important staples of a K-12 education today. It is at this point that I draw attention to the success of the PD initiative within the confines of the structures of schools. It's important to recognize that some of the skills pushed through the PD initiative are subversive and do not want to be entertained by some educators as they speak directly against the historical nature of schooling to gain consistency, in-depth national knowledge, or quantitative data points such as grades and test scores. Considering all of the above mentioned, Parnell school district was able to imagine possibilities and ways of being within the confines of their schooling structure, making do of what they had, while simultaneously trying to push further. This directly speaks to questions about the scalability and generalizability of this study. Is it possible to replicate this study in a district that is completely different from Parnell? Is it possible to replicate this study in a district similar to Parnell? My answer is that it would be dependent on

each district's context and that we shouldn't paint school districts with the same brush, just like we shouldn't brush each of our students with the same, as each has its own iconic features.

It is also necessary to consider my background, having been born and raised in Toronto, Canada of Korean heritage and attending public schools from K-12, where diversity and issues of social justice and inclusion were part of each school's mission statement and socially just/culturally responsive teaching was the norm. I have also been immersed in the literature of socially just/culturally responsive/social activism, etc. studies over the last four years as a graduate student. Thus, as I collected data and immersed myself in this study, I brought to it an expectation that public education should take on a socially active perspective and, moreover, that teachers had an obligation to be social advocates, in some manner, as civil servants.

Surfacing these assumptions naturally emerged the limitations as researcher of this study. First, as a pupil of, and advocate for, social activism in the classroom, it is possible that I denied seeing or hearing the insights provided by teachers who thought/perceived otherwise. In addition, I entered the research study with a goal to achieve some sort of social awareness amongst the teachers I worked with in the district and could have been particularly drawn to those teachers who demonstrated strength in a critical perspective of teaching for the 21st century, potentially skewing my observations and perceptions of teachers based on their level of socially charged teaching in the classroom.

It was necessary for me to engage in discussion with a colleague heavily versed in 21st century education philosophies, and professors whose expertise was in areas of systemic change, leadership, professional development, qualitative research and researcher biases, transnational/world literature, to navigate the different channels of interpretation and understanding my observations potentially led me toward, without my knowing it, in order to minimize the possibility of limiting my interpretations to a singular critical perspective. Lastly, I invited all of my teacher participants and the

assistant superintendent of Parnell Schools to a discussion about my findings and garnered their thoughts and responses to act as confirmation of my interpretations and/or to include additional participant insights in my analysis.

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By approaching my Action Research Study from a macro standpoint, I was able to analyze a variety of teachers' experiences from across grade levels and disciplines as they engaged in the EEF PD initiative. The data analyzed to support the macro portion of the Action Research Study provided insights into the conditions that made a successful and effective professional development initiative; how teachers examined and revised existing curricula from across a school district (grade and discipline), giving a broad understanding of what was required to achieve change not dependent on subject or grade level; and the myriad of affective (motivation, beliefs, values) variables that impact how teachers learn and to what extent. Bandura's social cognitive theory provided me the foundation to analyze the motivational aspects that played a role in how teachers persisted through challenging activities in the PD initiative. Bandura's theory offered a basis to discuss varying levels of resilience and change in practice in different teachers.

Bruner's learning theory provided me a guideline to examine the scaffolding and practice teachers needed in order to adopt new abstract concepts or to make meaning of what they were learning in the EEF PD initiative. Using Bruner's example of a 'spiral curriculum, I analyzed how various activities in the EEF PD initiative offered a gradual release of responsibility to teachers until they eventually adopted new ways of thinking and were able to examine their teaching practices critically and independently. Cochran-Smith and Donnell's Teacher Research Theory also made it clear how teachers' perceptions of their multiple roles as teachers, learners, and researchers, impacted their

participation in the EEF PD initiative and their ability to re-evaluate or adapt their existing teaching practices. When teachers were unable to view themselves as more than just ‘teachers’ new knowledge, ability to adapt, re-evaluate, or imagine new possibilities was difficult to do.

By also approaching the EEF PD initiative from a micro standpoint, I was able to dig deeper into the analysis of three teachers, of the same grade level and the same discipline. This offered me the opportunity to examine three teachers experiences from beginning to end of the EEF PD initiative providing an in-depth analysis of particular PD activities/discussions that acted as ‘the event’ that changed how they perceived their teaching practices or beliefs as teachers in the 21<sup>st</sup> Century. All the while noting that ‘the event’ that may have catapulted one teachers’ ability to critically adapt their practices, but may not have impacted another teacher in the same way. The micro portion of the Action Research Study was driven by how each individual teacher was able to navigate the conditions of the EEF PD initiative. Each of the three teacher’s ability to negotiate the interconnected and sometimes complex PD conditions impacted whether or not they were able to change in the way they viewed their teaching practices. In this respect, the conceptual framework acted as a personal road map for each teacher providing a foundation to discuss the relationship between teachers’ levels of self-efficacy, perseverance with new knowledge, and willingness to re-examine the roles they play as teachers, learners, and advocates for change. Having both a macro and micro view into the EEF PD initiative provides richer contextual information and a greater opportunity to generalize some of the data analysis presented in Chapter V.



## Chapter IV

### CONTEXT OF MACRO AND MICRO PARTICIPANTS

#### Overviews: A Macro Description

##### **Parnell School District**

Parnell School District is located in northeast U.S. Approximately 2,500 students attend Parnell School District. The Parnell School District has four school buildings: Hollyeye Elementary School Pre-Kindergarten through 2, Wintergreen Intermediate School grades 3-5, Walking Path Middle School grades 6-8, and Willow Branch High School grades 9-12. Parnell School District's students continue to be among the nation's highest ranking when it comes to standardized test scores and graduation rates. Ninety-seven percent of Parnell School District high school graduates are accepted into highly competitive colleges and universities. In addition, Walking Path Middle and Willow Branch High School are National Blue Ribbon schools, while Hollyeye Elementary School is a State Blue Ribbon School. Parnell School District is situated in one of the most affluent communities in the northeast. Based on 2010 US Census data, the age demographics in Parnell are as follows:

- 31% under the age of 18
- 4% from 18 to 24
- 31% from 25 to 49
- 23% from 50 to 64
- 11% who were 65 years +

And the median household income in Parnell, CT was \$209, 630.

**Parnell High School: Student and Faculty Diversity.** Parnell High School is made up of 80 teaching faculty and 778 students from 9th to 12th grade.

*Table 2. Indicators of Educational Need*

### INDICATORS OF EDUCATIONAL NEED

Need Indicator	Number in School	Percent in School	High Schools	
			% in DRG	% in State
Students Eligible for Free/Reduced-Price Meals	19	2.4	1.8	29.3
Students Who Are Not Fluent in English	0	0.0	0.2	3.6
Students Identified as Gifted and/or Talented	25	3.2	10.5	5.2
Students with Disabilities	53	6.8	9.8	10.7
Juniors and Seniors Working 16 or More Hours Per Week	12	3.5	8.6	13.2

*Table 3. School Diversity*

### SCHOOL DIVERSITY

Student Race/Ethnicity			Percent of Minority Professional Staff :3.9
Race/Ethnicity	Number	Percent	Open Choice:
American Indian	0	0.0	3 student(s) attended this school as part of the Open Choice program. Open Choice brings students from urban areas to attend school in suburban or rural towns, and students from non-urban areas to attend city schools
Asian American	24	3.1	
Black	9	1.2	
Hispanic	21	2.7	
Pacific Islander	0	0.0	
White	723	92.9	<b>Non-English Home Language:</b> All of this school's students come from homes where English is the primary language.
Two or more races	1	0.1	
Total Minority	55	7.1	

**Teacher Recruitment at Parnell District.** The teacher selection process at Parnell School District is extremely competitive and highly selective. Parnell prides itself in the quality of teachers employed in the district. Parnell has determined quality teachers to include:

- (1) Strong academic histories (high GPAs in both undergraduate and graduate work)
- (2) Extensive professional experiences that add to a teacher's uniqueness, expertise in a particular discipline, and/or demonstrated innovative thinking
- (3) Interpersonal skills that include: highly motivated, lifelong learner, proactive and initiates, looking to grow professionally, a team player and able to collaborate.

There is a three-step screening process. First, teacher candidates must send their curricula vitae, transcripts, and letters of intent directly to the Central Board Office, where the superintendent and assistant superintendent initially screen candidates. The first round of interviews is held at the district level; in the second round, the curriculum instructional leader is added to the interview process; and the third interview includes a teaching demonstration observed by the principal of the school, curriculum instructional leader, and assistant superintendent. Teacher candidates who apply to Parnell School District must demonstrate strength in previous academic experience, successful and notable professional experience, innovation and uniqueness to bring value to the district, and they must complete a rigorous interview process. Teacher salaries in Parnell School District are among the highest in comparison to many of the districts across the state.

On average, Parnell receives over 360 applications for various teacher positions across the district. On average, Parnell hires up to 10 teachers a year. Obviously, the process is highly competitive. The statistics suggest two possibilities that can explain the phenomenon: (1) that the economy is bearing/graduating more teachers than needed, and (2) Parnell is a highly desired district to work in. The teacher hiring process at Parnell School District is important to consider, as the teachers involved in the PD initiative and across the district are a majority of highly motivated individuals looking to further their own learning and teaching experiences. It is necessary to note the overall group of teachers employed in the district and the motivating factors that brought them to the district and how those factors impact their perceptions of participating in the PD initiative.

#### **Mission Statement, Core Values and Beliefs, Social and Civic Engagement.**

Parnell High School added to their mission statement in 2010 by including "core values and beliefs" and "social and civic expectations" as part of their overarching school goals (see Figure 12). The new additions reflect the goals of the EEF PD initiative. Parnell knew they needed to acknowledge the 21st century and how the district was planning on

to move toward a more 21st century way of teaching and learning. By adding these two statements, Parnell emphasizes the importance of citizenship not only in the school community, but also the global community.

**Mission Statements: Alignment Within the Hierarchy.** A mission statement is often an anchoring document for a group of individuals. A mission statement provides a singular vision and overall goal of various members to a group of people. It is stated to create unity and cohesion among the various members of that group. The ultimate goal of a mission statement is to achieve alignment between the various levels, groups, and moving parts of a larger organization. To gain alignment, cohesion, and a unified front, myriad organizations have utilized a variety of methods to try and achieve this. Those methods will not be discussed at this time. One way that has successfully achieved the goals of a mission statement is by ensuring the presence of various voices in an organization, no matter how small or large it may be. By involving key members from various departments, levels, and branches to join in the creation of a mission statement, several perspectives are brought together to build a collective goal.

The true test comes when individuals who were not part of creating the mission statement are asked what the mission statement goals are, in an effort to check for alignment. In varying organizational structures, sometimes alignment is achieved, and other times there is misalignment among the individuals of the organization due to misinterpretation, unawareness, or lack of professional development to support the mission statement goals.

WHS is committed to providing a safe and intellectually challenging environment that will empower students to become innovative thinkers, creative problem-solvers, and inspired learners prepared to thrive in the twenty-first century.

We believe that effective teachers:

Create opportunities for intellectual risk-taking, collaboration, problem-solving, and application of classroom learning to real life situations; Implement strategies that promote ownership of learning to students; Design instruction to integrate a variety of innovative

technological tools and resources to enhance learning;

Demonstrate ongoing professional growth in order to increase the quality of instruction; and Collaborate with colleagues to share and discuss exemplary practices, interpret student performance data, and design assessments that promote twenty-first century skills.

We believe that successful students:

- Communicate (writing, presenting) in a meaningful way for a variety of purposes and audiences;
- Demonstrate a sensitivity to the precision and nuances of written, visual, and aural medium (books, art, film, data, maps, graphs, music) through comprehension, interpretation, and evaluation;
- Employ critical and creative thinking skills to solve problems; and
- Pose questions, examine possibilities, and apply skills to find solutions to authentic issues.

#### Social and Civic Expectations

1. Make positive choices related to physical and mental wellness; and
2. Contribute to the local and global community (environment, etc.) in a collaborative and respectful manner.

*Figure 12. Parnell High School's Core Values and Beliefs*

Since one of the major goals of this research study is to explore ways in which to build a bridge between practice and theory, policymakers and practitioners, it was important to investigate whether or not Parnell had achieved alignment within their district in relation to the new PD initiative they implemented.

The English Department mission statement at Parnell was created by key individuals who represented various levels across the district. A formal document was created and printed for distribution. In addition, curriculum instructional leaders created variations of the mission statement for display on their teacher websites as they understood the document. In turn, teachers interpreted the written document, any variations created by CILs, and cultivated their own interpretation and understanding of

the Parnell English Department mission statement. There are distinct features that evidence some of the disconnect between administrators' perspectives and practitioners' perspectives. It is important to take note of these distinctions, as they directly impact teachers' perceptions of the overall PD initiative being implemented at Parnell. The nuanced differences in understanding either aided or impeded teachers in experiencing any change in teaching practices or thinking.

**Administration: A Macro View of the English Discipline in Order to Push the Initiative.** Since the EEF initiative was originally initiated by the Assistant Superintendent, the PD initiative can be considered a top-down mandate, although the initiative was intentionally carried out in a way to minimize any hierarchical pressures. In this respect, administrators embraced the PD initiative enthusiastically and with a motivation to implement it across the district as soon as possible. Administrators quickly revised student and program handbooks by updating mission statements across the various school levels in the district to reflect the new goals of the PD initiative. Since the PD initiative attempted to break down the silos of discipline-specific teaching by introducing the concept of cross-disciplinary and transferable skills, the English Literature mission statement created by the district administration was less content-specific and more focused on the transferable skills students would need in order to thrive in the 21st century. This demonstrates one way in which the district attempted to achieve alignment in goals across the district. By adapting the mission statements to reflect the goals, faculty and students would be aware of the new direction the district was headed in.

**Curriculum Instructional Leaders: An Attempt to Satisfy Both Sides of the Coin.** After revised mission statements were issued by administrators across the district, Curriculum Instructional Leaders (faculty assigned to supervisory roles) were charged to relay the new message to practitioners. As each CIL is essentially the leader of each department at Parnell Schools, it was his/her responsibility to ensure that the teaching

faculty was aware and understood the new direction of the district and implemented these goals into their classrooms on a daily basis. CILs across all disciplines used various means to complete the task of educating their department's teachers. In the English Department, the CIL posted a revised version of the new mission statement on her school webpage for both students' and teachers' benefit. When interviewed, the English CIL explained that it was necessary for her to re-write the administrators' mission statement for two main reasons:

- (1) So teachers and students could understand what the mission statement meant
- (2) So teachers and students could see the connection to their specific discipline  
(English)

The English CIL made it clear that many of her department faculty had read the revised mission statements and responded with negative comments with regard to the lack of connection the mission statements had to their disciplines. They feared their disciplines were being threatened in a way of losing their purity by not focusing on content-specific knowledge and skills. They worried that the cross-disciplinary and transferable nature of skills the district was hoping to instill in their students would limit their students' abilities to truly analyze and demonstrate deep thought required in the study of English Literature and the English Language.

Due to this response, the CIL crafted a revised mission statement and highlighted the teaching of English into the text for teachers to see the relevance, connection, and positive possibilities of merging the district initiative's goals with the department's. The CIL perceived herself to be a mediator between administrator and practitioners.

**Practitioners: In the Trenches and Dealing with the Present.** Practitioners were asked to share the Parnell English Department's mission statement, as they understood it and as they thought it should be written. All of the English teachers interviewed, except one, shared consistent definitions of what they thought the English Department's mission

statement should be and how they understood it to be at the present time. Many teachers responded that Parnell High School's English Department mission statement is:

- To create good communicators and problem solvers
- To get kids to think critically and creatively
- To make sure kids can read and write well and share their ideas by the time they graduate

Although similar to the mission statements of the Parnell administrators and CILs, the teachers shared mission statements that were obviously linked to their daily goals and hopes for the students in the classrooms. They did not share mission statements that reflected larger goals that required more abstract thinking or had global impact; rather they shared statements that listed practical skills needed in the classroom on a daily basis.

One explanation for the subtle misalignment of mission statements created for and within the English Department at Parnell is how much individuals' context impacts their decisions, understandings, and ways of thinking. As Gee (2003) posits, individuals' experiences and present activities directly correlate to how people situate their thinking. Demonstrated through the language used by administration, the mission statement offered a broader look at the overarching skills they hoped to develop in students over their academic careers at Parnell. The language used in the mission statement of the curriculum instructional leaders, attempted to bridge the broader goals of the district by using practical language teachers could interpret and directly use in their classrooms on a daily basis. The CIL's description, offered a list of strategies teachers could use, examples of products students may create to demonstrate their understanding of the mission statement and the overall standards of the discipline teachers needed to fulfill throughout the year. In contrast, the language used by teachers to describe the school mission statement were specific to the classroom and their students. Teachers explained the various activities they engaged their students with and what those activities garnered in terms of skills. Rather than looking at the broader, more vague skills such as



‘developing critical problem solving skills’ which could encompass a variety of skills and thinking habits, teachers simply equated a task to a skill. For example ‘reading=thinking’. Although a similar message is emitted through the three different mission statements it is obvious different members of the district put different emphasis on various concepts.

Table 4. A Comparison of English Department Mission Statements

Principals/Superintendents (Administration)	Curriculum Instructional Leaders (CILs) (Administration-Practitioner Liaison)	Teachers (Practitioners)
<ol style="list-style-type: none"> <li>1. prepare students for a vital and rapidly changing future</li> <li>2. developing critical communication skills through complex thinking, problem solving and collaboration.</li> <li>3. A multiplicity of eclectic experiences in reading and writing</li> <li>4. enhance their abilities and initiate their own growth.</li> <li>5. thoughtful reading, discussion and writing, promote depth of understanding, broadened perspective, and imaginative exploration, as well as connections to learning in other disciplines</li> </ol>	<ol style="list-style-type: none"> <li>1. empower each student through the development of comprehensive English language communication skills.</li> <li>2. extensive and varied reading scaffolded in complexity across all genres, a multiplicity of writing experiences, research projects, integrated visual literacy and technology, presentations, and performance assessments.</li> <li>3. work ethic necessary to ensure future success in academia and in life.</li> <li>4. Conceptual themes for each year. <ul style="list-style-type: none"> <li>• Grade Nine: <i>Archetypes and Belief Structures</i></li> <li>• Grade Ten: <i>The Journey</i></li> <li>• Grade Eleven: <i>Forging Identity</i></li> <li>• Grade Twelve: <i>The Search for Meaning</i></li> </ul> </li> <li>5. students solve problems and formulate answers to these significant queries through the integration of close reading, annotation, literary analyses, scaffolded questioning, a variety of writing experiences, classroom discussion, corollary readings, research, related viewings of film, audio opportunities and homework.</li> <li>6. parallel teaching with social studies as well as other disciplines.</li> </ol>	<ol style="list-style-type: none"> <li>1. to have effective problem solvers, good citizens who are able to communicate, collaborate. We want thinkers. able to think and to express that thinking as best as they can. Express your thinking clearly.</li> <li>2. reading = thinking</li> <li>3. thinking and responding= communicating</li> <li>4. Written communication is the most effective and purposeful means of communication</li> <li>5. to learn to collaborate with your peers on one shared voice</li> </ol>

### PHS English Department

In the department of English, there are eight teaching faculty members and one curriculum instructional leader who oversees the English and Fine Arts Departments. All

eight teachers instruct a variety of courses and across all levels. They work in like subject teams to plan, but also work across grade levels in the English Department to plan and discuss changes to courses for upcoming years to ensure alignment across the department. Teachers are given one similar planning time a week with a partner in the department to encourage paired planning. Teachers also meet once a month for faculty department meetings to discuss matters related to the department.

A variety of courses is offered across grade levels at Parnell.

*Table 5. List of Course Offerings in Parnell High School's English Department*

Academic English 9	AP English Literature	Shakespeare
Honors English 9	Humanities I Honors	Mysteries and Mayhem
Academic English 10	Humanities II Honors	Science Fiction -- an Oxymoron
Basic English 10	Journalism	Film Studies I
Honors English 10	Advanced Journalism	World Film
Academic American Studies English	Creative Writing Workshop	Public Presentation
Academic English 11	Writing Competency	Drama Practicum
Basic American Studies English	Scriptwriting	Advanced Drama Practicum
AP Language and Composition	Comparative Mythology	Foundational Competency

There are three possible tracks students can follow: Basic, Academic, and Honors/AP. Unlike traditional tracking, students at Parnell are able to move across levels if they desire to. Students must apply to move from General to Honors, and AP. They discuss their plans in an interview with the curriculum instructional leader and teacher of the course in order to switch levels. The interview process reviews whether or not the student requires in-class support or any other information about the student's learning habits to help ensure a smooth transition and success in the new level.

Students at Parnell must complete four credits of English and a mandatory "sophomore research paper" in order to graduate from Parnell high school.

AREA	CREDITS
English	4.0 credits*
Mathematics	3.0
Science	3.0
Social Studies including US History & .5 American Government	3.0
Fine and Performing Arts	1.0
Physical Education	1.4
Health	0.6
Other	1.0 Technology
	0.8 Found.Comp***
	6.2 Electives
Total Credits	24.0

\* Every student must also successfully complete the Sophomore Research Paper.

*Figure 13. Graduation Requirements*

English classes at Parnell High School have been commented to be “highly engaging” (Interview, Lavonen, 2012), infused with “lots of student autonomy” (Interview, Syk, 2012), and “interestingly balanced in teacher and student focus” (Interview, Lim, 2012). A typical English class at Parnell involves a variety of pedagogical methods facilitated by the classroom teacher. On a very limited basis, teachers hold lecture-style classes, knowing that students need to be actively engaged and involved to maximize their learning experience. On a more frequent basis, teachers provide students with opportunities to engage in debates, Socratic seminars, project-based learning, and group discussions (both whole class and small literature circles). In the 52 minutes assigned to each period, English classrooms at Parnell take on a variety of seating arrangements based on the activities prepared for that particular day. Chairs in groups, in rows, facing one another, missing from the room altogether, demonstrate the myriad of learning scenarios English classes provide for students on a daily basis. At the sophomore and senior levels, teachers are oftentimes facilitators while students direct their learning autonomously. Teachers are, however, prepared with the knowledge and

resources to assist/guide their students to the necessary sources of information when needed.

### **Community Involvement and Ivy League Colleges**

The parent community of Parnell School District is known to be highly involved in students' academic careers. This is demonstrated by extremely active PTOs, parent volunteers at the elementary level, large monetary donations to the district by parents, and high rates of parent attendance at board of education (BOE) meetings, district state of affairs, monthly information seminars, and other events directed to parents in the district. Many parents not only attend meetings, but are in dialogue with teachers and administrators about their child's progress. It is known in Parnell District that many parents expect their children to attend Ivy League colleges after graduation. In turn, Parnell School District prides itself on the number of students who attend Ivy League and other highly selective colleges upon graduation.

In the *Program of Studies Handbook*, a portion of the document addresses potential disagreements that may occur with regard to a student's grade or teachers' standards. Parnell offers the procedure students and parents should follow in order to dispute a grade and request review, and/or raise "general concerns regarding a given teacher's standards".

## CHAPTER V

### A DISTRICT WIDE GLOBAL INITIATIVE

#### **The Inspiration to Move Toward a 21st Century Education**

In 2011, Ted Scots held a kick-off meeting for teachers at Parnell School District who were interested in the Envisioning Education for the Future (EEF) initiative. The teachers who attended this meeting voluntarily attended and either heard about the district-wide initiative by word of mouth from a colleague, through the community, or from their school administration. Ted hoped that at least one representative from each grade level and discipline would attend from across the district, but he wasn't sure.

Ted Scots, the assistant superintendent of curriculum and instruction at Parnell School District, was the type of person you knew functioned at 100% all day, everyday. He was energized, and his mind was constantly in high gear. To put it simply, Ted was a type A personality with energy to spare. He had been a middle school principal prior to his role as assistant superintendent and also taught several years K-12 with additional background in special education and counselling.

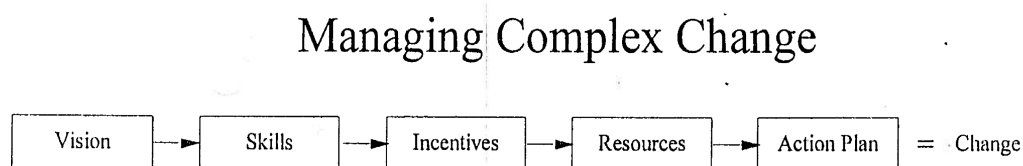
In his third year as assistant superintendent at Parnell, Ted began formulating ways in which he could spark a district-wide change at a school district that was already graduating 99.9% of its students, sending more than 80% of them to selective colleges, and over 95% of students were scoring in the 90+ percentile on state-wide standardized tests. For some looking in on this district, there was no need for change, especially district-wide change. Why fix something that wasn't broken and already succeeding so well? Ted thought differently, however. Rather than rest on Parnell District's laurels, he wondered, "Are we challenging our students to be critical and creative thinkers? Do our students know how to apply what they learn here to other situations, or are they learning

in a vacuum? Are we truly preparing our students to be the most competitive candidates in the entire world with their education here at Parnell?"

Ted Scots knew his students could recite the multiplication tables, the periodic table of elements, and Newtown's laws of physics, but he didn't know whether or not they could apply those pieces of knowledge gained over the years to novel, real-world situations. Did students leave Parnell filled with knowledge just to forget it in a few years? Or did they reach a level of mastery, a level of deep understanding where they could actively engage the knowledge gained and apply it? These questions motivated him to re-consider Parnell's current curricular assessment and daily instructional teaching practices and initiate the EEF initiative.

Once the initiative was on its way, Scots championed it through in all respects. He knew the 'buy-in' needed in order to gain the trust of his teachers, his administrators, his community, and potential funders. He sought out a university with faculty that would act as professional development facilitators and critical friends. He created a 5-year plan that involved Board of Education meetings, Education Foundation Fundraisers and Information Nights, Community Outreach, and Select Media pieces to shine light and bring attention to a district inspired initiative, and he knew the more he believed in this initiative, the more likely it would come to fruition not only in his district, but maybe even in others by example.

Ted Scots believed that in order to achieve change, certain supports needed to be in place and a certain hierarchy of needs had to be met in order for optimum conditions for change to occur. Ted often referred to the "complex change sequence" to support his actions.



*Figure 15. Managing Complex Change. J. W. Hoff, adapted from T. Knoster, 1991.*

During a school year kick-off meeting in 2011, Scots began his presentation to 20 or so teachers from across the district with a charge for each teacher sitting in the room. As his PowerPoint slide listed desirable characteristics, he told the audience, “For this ride, you will need to bring 1. Creativity, 2. A Collaborative spirit, 3. Flexibility and comfort with ambiguity, 4. And resolve.” He had gained the attention of his audience.

### **Category One: Implementation of the EEF Initiative**

#### **Why Parnell School District Initiated District-wide Professional Development**

As much as Ted Scots’s enthusiastic desire to challenge his school district acted as the initiating event that placed Parnell School District on a path towards a more 21st century education, the landscape of assessment in education acted as the foundational piece in the creation of the professional development program that would eventually be implemented district-wide.

With Ted’s direction, and my expertise as a professional development advisor, Parnell’s goal was to develop and implement a valid and reliable internal assessment framework that measured student achievement of specified, high-priority 21st century skills, competencies, and understandings. They also wanted the assessment to inform and drive instructional decisions and innovations in the classroom.

For this particular case, the reductive nature of standardized assessments was the key driver that directly impacted the professional development initiative put in place in Parnell District schools. The troubling nature of reducing students to a single data point acted as a catalyst, urging Parnell District schools to review their philosophies around assessment, curriculum, and daily practice. Acknowledging the reductive nature of standardized assessments offered an opportunity to look at assessments in a new way. They urged educators to no longer look at assessment as the "assessment of learning". Rather, these drivers provided a tri-fold approach to looking at assessment *as* learning,



assessment *of* learning, and assessment *for* learning (British Columbia Ministry of Education, 1999).

**Assessment is the Primary Determinant of Classroom Instruction: Policy, Theory, and Practice.** First, the notion that *assessment was the primary determinant of classroom instruction* provided practitioners an easy roadmap to follow. If educators assessed where their students were before they began, the assessment would tell them exactly where to take their students academically. I could go as far as to say that a good assessment plan directly drives exemplary practice and innovations. The concept that teachers know where they are beginning provides them with a sense of knowing what their students need and in turn gives teachers an opportunity to plan and lead their students to any destination. This carries the assumption that teachers are autonomously granted the ability to create their own assessments based on what they teach so they can measure what is on the agenda. The phrase, “We teach what we test, and we value what we measure” is the essence of how assessment drives instruction but at times has been grossly misinterpreted as “teaching to the test”.

It would only make sense that policies put in place for the betterment of education, or any profession for that matter, would directly inform practice in a way professionals could utilize the research and theory embedded in those policy documents in their daily work. Sometimes this does occur, and other times there is a disconnect between policy, informed by theory, and practice. Because so many “external” assessments do not effectively drive the “implemented” curriculum, it in turn does not impact *daily* instruction in a way that benefits students or teachers’ teaching and learning practices. State/federal policies, such as NCLB, RTT, have demonstrated how they have fallen woefully short of really impacting teaching and learning in a productive way.

**Standardized Academic Assessments are Limited to Assessing Core Academic Skills and Content.** Second, *standardized academic assessments given throughout the United States assess core academic skills and content* but not the capacities and deeper

higher-order thinking skills students must be part of in order to engage in issues and problems on a deeper level. The quote, “The skills that are easiest to teach and test are the very same skills that are easiest to digitize, automate, and outsource” (Jerald, 2009), sums up why standardized assessments are administered in the first place as an accountability measure. For purposes of efficiency and cost-effectiveness, standardized tests inevitably lead to lower-order thinking questions that can be marked with a quick yes/no or multiple choice where answers are already explicitly given. If we equate these questions to the skills that are automated and digitized in an educational environment, they would be the ones that are easiest to teach in texts: recall, rote memorization, finding explicit answers, overall assessment of basic skills. These skills are easiest to teach, easiest to test, and are the ones that get sent out to be scored, and these are the skills a majority of state tests across the nation are framed around.

Based on the northeast area alone, state-wide exams, NAEP assessments, IQ tests, and achievement tests make up myriad "external" assessments that measure students' knowledge and understanding of core academic content. However, based on countless research studies it is clear that assessment should be meaningful, authentic, and purposeful. Several studies indicate that assessments that can do this and measure what a student can do provide students opportunities to demonstrate deep understanding and the capacity to think critically and creatively. Moreover, they provide opportunities to students to transfer knowledge and apply their learning to authentic situations.

**Statistics to Rank Districts.** Third, rampant across the United States, the inane *practice of “ranking” districts adds little to no-value to the teaching and learning process.* Here is a debate where policymakers believe the ranking of districts (1) provides a picture of where you stand in terms of the rest of the nation on the same core skills that are to be taught across the country; (2) provides motivation for districts to improve; and (3) keeps districts accountable to the public and how they are educating the nation's children. Practitioners, on the other hand, argue that ranking districts does not make

teachers accountable, is uninspiring and troubling to the teaching profession, provides no true measures of what teachers do, and is a slippery slope for education.

*Standardized assessment scores are statistically insignificant to districts that are already scoring well on standardized assessments.* Those districts that score in the 95+ percentile range would only need to target a very small population of students who are not scoring better than 70% on these assessments. Districts that are already succeeding, according to national standardized test expectations, would have little to do in order to improve or change their teaching practices, in turn, remaining at the status quo and never looking for further challenges or to continue learning. Standardized assessments reduce students to single data points each year rather than providing a holistic overview of students' learning patterns and histories.

These three drivers prompted Parnell School District to re-evaluate its assessment practices and consider alternate means of assessing, teaching, learning, and thinking about what education is needed for the future. As Shepard (2009) posits, in a learning culture there are various forms of assessment that often take on three main shifts in thinking. First, in the way educators administer and consider classroom assessment, a reformed vision of curriculum, and finally a return to a blend of cognitive and constructivist learning theories. Shepard focuses on the more formative nature of 21st century assessments where not only learning outcomes are measured but learning processes are considered just as important. He calls for a return to transparent expectations so students know exactly what to expect and so teachers can use information to inform their daily teaching practices. He also discusses the shift in mindset, where educators must move from a deficit model to a model of assuming competency, providing students with curricula that embrace equal opportunities for diverse learners, fostering a democratic and empathic way of thinking, simultaneously crafting dispositions and habits of mind and not just content knowledge. Shepard grounds these paradigm shifts in cognitive and constructivist learning theories where learners are required to construct

knowledge and understandings within social contexts and in meaningful ways. If 21st century assessments can embrace these three areas of change, they are bound to be able to assess true 21st century skills, according to Shepard. In response, Parnell School District began planning a district-wide PD initiative that would engage teachers to think about what it means to educate students for the 21<sup>st</sup> Century and what it means to be an educator in the 21<sup>st</sup> Century.

### **Professional Development Structures**

#### **What Parnell School District Implemented District-wide Through PD**

After considering Parnell School District's goals:

1. To develop and implement a valid and reliable internal assessment framework that measured student achievement of specified, high-priority 21st century skills, competencies, and understandings
2. To inform and drive instructional decisions and innovations in the classroom

it was necessary to create a professional development process for teachers to navigate through, in a realistic timeframe that addressed the needs and wants of both the teachers and district leaders.

*Table 6. Six Step Instructional Design Process*

<b>Step</b>	<b>INSTRUCTIONAL DESIGN PROCESS</b>
<b>1</b>	<b>Identify Unit and Subject Matter Content Standards</b>
<b>2</b>	<b>Identify 1 or 2 Student Outcomes from 21<sup>st</sup> Century Outcomes Matrix</b> a. Outcomes that “complement” the unit well
<b>3</b>	<b>Design Pre-Test</b> a. Brief assessment of the selected 21 <sup>st</sup> Century outcomes b. Design rubric
<b>4</b>	<b>Design Post-Test</b> a. Performance assessment that is an <u>application</u> of the <u>content</u> & the <u>selected 21<sup>st</sup> Century outcomes</u> b. Design rubric

5	<b>Teach Unit</b> <ol style="list-style-type: none"> <li>a. Explicitly teach for student mastery of the selected 21<sup>st</sup> Century outcomes and subject matter content</li> <li>b. Collaborate with colleagues to design and plan instruction....(a necessity since explicitly teaching for mastery of the selected 21<sup>st</sup> Century outcomes will be challenging to all)</li> </ol>
6	<b>Administer Post-Test</b> <ol style="list-style-type: none"> <li>a. Collaboratively score student work</li> <li>b. Analyze student work</li> <li>c. Analyze performance data</li> </ol>

Using a Design-Based Research methodology, a six-step instructional process was created that would measure student achievement on one to three 21st century capacities (see Table 10) in a given content area, providing a one-time measure of whether or not students changed over the course of a single unit. This methodology was put in place by me and my PD team.

**Design-Based Research.** I chose to implement a Design-Based Research (DBR) methodology, sometimes known as "doing research through design" or "design experiments," for the district-wide initiative because it offered a heavy emphasis on analyzing data within context, which was paramount to the district-wide study. Hoadley (2004) posits,

In design-based research, the process of forcing the same people to engage the theory, the implementation of interventions, and the measurement of outcomes encourage a greater degree of methodological alignment. Design-based research is, at its heart, an attempt to combine the intentional design of learning environments with the empirical exploration of our understanding of those environments and how they interact with individuals. (p. 21 )

DBR was specifically used to improve educational practices, which was precisely what Ted and I aimed to do at Parnell School District. Dede (2004) argues, "Design Experiments are contextualized in educational settings, but with a focus on generalizing from those settings to guide the design process" (p.3). DBR, in essence, is an amalgamation of several epistemological stances' select characteristics. DBR is cyclical

in nature, continuously pushing the researcher, participants, and study to be adapted and changed in an iterative manner. Similar to formative assessment, the iterative nature of DBR offered me and my PD team opportunities to embed research in current context before we moved forward in our study. The process of designing while researching was an opportunity for learning to occur for all parties involved (Edelson, 2002). DBR allowed for context-dependent interventions to take place. This allowed for missteps to be rectified in a timely manner and the introduction of new procedures without delay, when needed the most.

Since the professional development initiative offered opportunities to study the actors (participants) involved in daily classroom instruction and in the creation of assessments, implement interventions in classroom instruction, and utilize both quantitative data and narrative interview data, DBR as a methodology effectively connected these important pieces of data in a logical and highly applicable way that could be utilized by researchers, the actors of the study, and policymakers. It can often be argued that the disconnect between scholars' and practitioners' priorities is directly rooted in the type of data collected and the way the data are utilized. For scholars, the daily instructional experiences/data collected of a practitioner holds little significance alongside large-scale findings. In contrast, practitioners would argue that large-scale findings provide data and analysis for trivial problems that have little or no effect on the daily outcomes of teaching and learning in the classroom (Dede, 2004). DBR bridges the gap between scholar and practitioner, by creating interventions founded in theories but practical in nature. DBR aims to achieve reasonable plausibility and generalizability so research studies who take on a DBR methodology are scalable and generalizable, in turn, useful on both a large and small scale. The danger in scholars overlooking the small-scale successes invariably results when they attempt to "recommend adaptation-and-transfer strategies" on a large-scale (Dede, 2004). Dede argues that the reasons we face "slower change" in education in comparison to the medical field are directly rooted in the

complex and unique contexts each educational setting holds--requiring several different interventions. The highly flexible and dynamic nature of DBR processes forced teachers and researchers at Parnell to engage in continuous refinement of methodological procedure and encouraged teachers to consistently reflect on the processes of designing while researching and learning. My PD team and I as researcher assumed two roles as both participant and observer in the study. Like ethnography, we, the researchers helped build theory from within as an actor involved in the study.

### **Six-Step Instructional Design**

I designed the six-step process, which Ted Scots named "The Six-step Instructional Design" for marketing value, to provide teachers the information necessary to inform their daily instruction. As we began to move through the PD initiative, it became apparent that a protocol was needed for teachers to follow as they learned new concepts and were asked to implement them in their daily teaching practices. As we engage in DBR the six step instructional design was created. The six-step process provided teachers with a baseline of where students' understanding of 21st century capacities was and where they needed to explicitly teach skills, competencies, and strategies for students to become more familiar in those very capacities. It allowed for teachers to take inventory of the good work that was already being done at Parnell School District, while providing enough movement to demonstrate where teachers could grow or challenge themselves further in their teaching, thinking, and individual learning. Lastly, the six-step process offered teachers opportunities to work collaboratively with colleagues as they grappled through new ideas and ways of thinking through experiential and reflective practices.

The six-step professional development process included the following activities for teachers to engage in.

**Step One: Choosing a Unit of Study.** Teachers were asked to choose an upcoming unit of study that was either already created and taught in previous years or currently being created to be taught that same year. Teachers were advised to choose a unit that would begin within two months so that they would have enough time to plan for their upcoming unit and adapt lessons. Having a two-month window provided enough time for teachers to plan, discuss, and create comfortably, knowing time was on their side.

For example, *Table 7. Example of Unit Focus and Schedule*

<b>Grade</b>	10th Grade
<b>Subject and Title of Unit</b>	English- The Great Depression
<b>Projected Timeline</b>	March 1st- April 20th
<b>Upcoming Meeting Times with University Partner</b>	Every Thursday beginning January 10th –February 25 <sup>th</sup>

#### **Step Two: Choosing 1-2 Student Outcomes from the 21st Century EEF**

**Matrix.** A detailed discussion of the EEF Matrix is included in the next section. For the purpose of discussing the six-step instructional design process, please refer to the EEF Matrix in Table 8.



Table 8. EEF Matrix Adapted by Parnell School District, 2010

Critical Thinking	Creative Thinking	Collaboration	Communication	Global
<b>Evaluating and Justifying</b> Students will be able to identify and clearly define authentic problems and significant questions for investigation while citing appropriate evidence to justify conclusions .	<b>Imagining</b> Students will be able to imagine new directions/approaches (including alternate, divergent, and contradictory ideas) to solve a real world problem.	<b>Engaging in Collective Intelligence</b> Students will be able to work as a group towards a complex problem that can only be solved through the collaboration and various expertise of each group member.	<b>Projecting</b> Students will be able to choose the most effective medium for the message, use knowledge and information interactively to share important information with purpose to impact readers/listeners/receivers.	<b>Engaging in Real World Problem Solving</b> Students will be able to utilize inter-disciplinary knowledge that involves deriving a new, innovative solutions to a real-world problem requiring students to synthesize knowledge.
<b>Interpreting</b> Students will be able to accurately <i>interpret</i> and demonstrate a deep understanding of the issue.	<b>Simulating</b> Students will be able to create models and simulations to explore complex systems and issues to identify trends and forecast possibilities.	<b>Engaging in Distributed Cognition</b> Students will be able to negotiate various person(s), digital tools, applications, digital mediums and environments to accomplish a specific objective	<b>Reflecting and Meta-Analysis</b> Students will be able to reflect, analyze and evaluate on progress of learning and implications for new learning	<b>Engaging in Global Issues</b> Students will be able to analyze ethical, economic, political, scientific & cultural issues affecting the world internationally and the transnational implications for humanity. This may lead to contributions of new ideas for advancing humanity.
<b>Analyzing</b> Students will be able to <i>deconstruct</i> a question or problem by identifying appropriate strategies, data sources, analogous examples and <i>underlying assumptions</i>	<b>Innovating and Transforming</b> Students will be able to identify and explore unique ideas, novel ideas, and original formats to solve a real world problem and/or transform existing ideas, knowledge and solutions into new ideas, products, and processes	<b>Suspending Judgment</b> Students will be able to suspend judgment to a high degree in order to grapple through complex issues	<b>Rationalizing and Contextualizing</b> Students will be able to apply and rationalize different mediums of communication in various contexts/environments to work in concert to accomplish a specific objective	<b>Perspectivizing</b> Students will be able to engage in an original empathetic response informed through examining an issue from multiple perspectives (e.g. alternate theories, possibilities, other absent sources).
<b>Synthesizing and Applying</b> Students will be able to demonstrate flexibility in <i>integrating</i> and <i>applying</i> personal, collective and generated knowledge to a novel application.	<b>Design and Research</b> Students will be able to engage in a design process involving modeling while conducting research using a variety of research tools, methodologies and various information	<b>Risk Taking &amp; Tolerating Ambiguity</b> Students will be able to negotiate problems when no obvious choice exists among a wide range of possibilities; this opens space for adaptations, further explorations, and risk-taking.	<b>Connecting and Applying</b> Students will be able to communicate with others globally seeing oneself as an individual, part of community and the greater world.	<b>Engaging in Multiple Modalities</b> Students will be able to engage in original combinations of two or more modalities requiring students to understand and go beyond the potentialities of each modality to solve a problem.

Teachers were asked to review the EEF Matrix and choose two capacities they believed leaned themselves naturally to their unit of choice. If teachers were inclined to choose a capacity from the Global Thinking Category, they were advised to limit their choice to one capacity. The reason teachers were asked to limit themselves when choosing from this category was because those capacities already encompassed many of the capacities from other categories across the table and it would have been redundant to choose two. Also, if teachers chose two capacities out of the same category, they were advised to choose from two different categories to make sure they were giving themselves opportunities to engage in multiple ways about thinking and learning.

For example,

*Table 9. Example of Two Capacities Chosen for a Unit*

English 10- 2 Capacities	
<b>Category:</b> Creative Thinking <b>Capacity 1:</b> Imagining	<b>Category:</b> Communication <b>Capacity 2:</b> Reflecting and Meta-Analysis

**Step Three: Create a Pre-test to Gather a Baseline of Your Students.** Teachers worked with me to create pre-tests that would provide a baseline of students' abilities to engage in the two chosen capacities for the unit. Very often, teachers began to create pre-tests that assessed content and not the capacities. I worked with teachers by assisting them in thinking about how they could create test questions in a different way. Teachers were already very familiar with how to test their students on their content knowledge. They knew how to ask questions to check if they had read the assigned chapter or comprehended the passage. What they were unfamiliar in knowing how to do was creating questions that provided students with opportunities to demonstrate they were "*imagining*" or engaging in "*reflection and meta-analysis*," capacities found on the EEF Matrix. Creating pre-test questions pushed teachers to think differently about how and what they were testing for. It also made them reconsider what it meant to create scenarios

that provided students opportunities to engage in skills and how that could be recorded and measured.

An example pre-test question:

Imagine what it would be like to live in the 1940's. Pretend you live in a different part of the world, what would your life be like? What are some of the similarities and differences to your life today in 2011?

**Step Four: Teach Your Unit.** Teachers were asked to embed explicit instruction of capacities into key lessons while maintaining content integrity by using the content as a vehicle to highlight their chosen capacity(s). Teachers used the two months leading up to their units to review their previous plans and goals. I facilitated teachers looking at key lessons and how they might slightly adapt those lessons to embed/infuse the two capacities they had chosen. The goal was to explicitly teach each capacity through existing lessons, using the content as a vehicle to do so. In some cases, this was as easy as providing alternate selections of texts available to students that differed from the original plans. In other cases, teachers drastically changed their lessons to reflect the capacities in an in-depth manner.

For example,

Table 10. A Comparison of an Existing Lesson and a EEF Matrix Adapted Lesson

Original Lesson	Adapted Lesson
<b>Goal:</b> students will reflect on a piece of literature	<b>Goal:</b> students will <b>reflect</b> on a piece of literature and <b>engage in meta-analysis</b> by reviewing their reflection and coming to a new conclusion.
<b>Task:</b> Read passage XXX. Reflect on this passage and explain what the author is trying to say. <b>Use your own opinions and evidence from the text to support your answer.</b>	<b>Task:</b> Read passage XXX, Why did the author choose to write this passage in this voice? <b>Whose voices are being privileged and whose voices are being unheard?</b> <b>How does the authors choice of voice impact you as a reader? How does his choice of voice impact his greater 'possible' audience as readers?</b>
<b>Notes:</b> This lesson is a typical lesson many English Literature teachers administer in their classrooms. The goal is to reflect, which at times is mistakenly used synonymously with recall, a very basic skill. The task actively charges students to use their own opinions, yet does not push students to consider the power dynamics of having an opinion and why they are able to have an opinion. Students are charged with a task to share their opinions but not with the task of considering why their opinions matter. Students are also charged with the task to analyze the text and find the evidence within the text that might support their reflections, but are not given opportunities to engage with the implicit evidence found throughout texts that require inferencing, interpreting and meta-analysis- thinking about thinking.	<b>Notes:</b> Although the lesson goal did not change drastically, by looking at the lesson with the capacity in mind, the goal became more detailed and the student task became richer. The task provides more opportunities for analysis and reflection, taking a social action spin. The task also places students in a more active role where they must consider the ramifications of the text. The text is no longer treated like a 'neutral' piece of text, nor are they, as students treated as 'neutral' readers who only impact themselves. The task actively charges the written words on the paper and actively charges students as readers. <b>Reflect:</b> in the yellow areas, students had to analyze the passage in order to figure out whose voices were being privileged and/or unheard. <b>Meta-Analysis:</b> in the purple areas, student had to consider the 'implications' of the author's choice to include or exclude certain voices in his passage.

**Step Five: Create a Post-test that Will Provide a Picture of How Students Have Grown over the Course of Your Adapted Unit.** At the end of the unit, teachers were then asked to review their original pre-test question. If after teaching the unit and

the adapted lessons the teacher believed the pre-test question still accurately measured the two capacities they chose, the post-test question was not changed and the same question given at the beginning of the unit was re-administered to students. The main goals of the post-tests were to allow teachers to compare their students' thinking from the beginning of the unit to the end; to see if there was any change in the way they engaged in the two capacities that were explicitly taught throughout the unit; and to look for any patterns or trends that were occurring among their students. And finally, the most important reason was that the post-test results were used to directly inform their next steps in teaching. Based on what the students still needed, teachers could plan their next step of daily instruction.

If teachers reviewed the original pre-test question and were not satisfied that it accurately measured the two capacities they had chosen, they had an opportunity to re-word and modify the question so that it would more accurately assess their students' abilities to engage in the capacities. In 100% of the cases we saw across Parnell School District in the first year, teachers wanted to adapt their question by the time the post-test arrived. The professional development they experienced impacted the way in which they saw their original test questions, and as good practitioners, they refined their craft (creating the post-test question) with the new experiences and knowledge they had encountered throughout the duration of the unit.

*Table 11. An Example of an Adapted Pre-test Question as Post-test Question*

<b>Original Pre-Test Question</b>	Imagine what it would be like to live in the 1940's. Pretend you live in a different part of the world, what would your life be like? What are some of the similarities and differences to your life today in 2011?
<b>Adapted Pre-Test Question for Post-Test</b>	Unit: Realistic Fiction (Reader's Workshop) Unit Objective 1: Analyzing plot & conflict 21st Century capacity 1: Global- real world problem-solving Pretest question: The following video clip/book has been viewed/downloaded by over 6 million people around the world. Use the story to answer the following questions:

	<p>What conflicts do you think are influencing the interactions between the characters?</p> <p>Unit Objective 2: Synthesizing theme &amp; message</p> <p>21st Century capacity 2: Critical Thinking- synthesize and apply, Global- engaging in Global issues</p> <p>Pretest question: Why might someone else who saw/read this very same clip/text take away a different theme or message than you did?</p>
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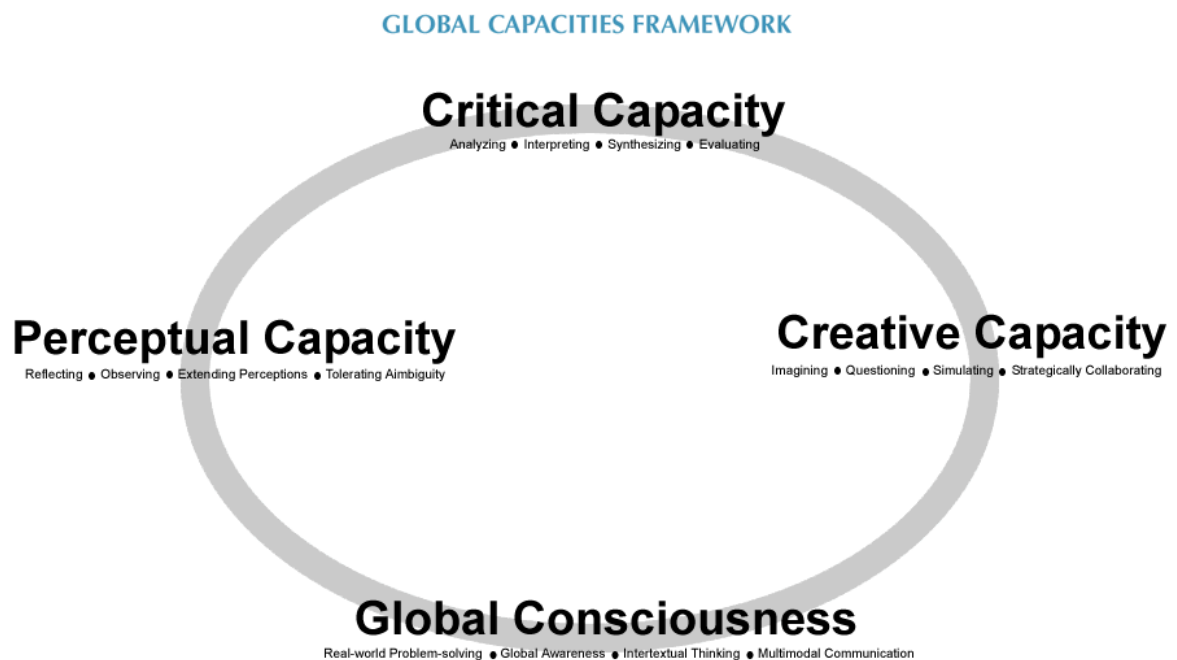
**Step Six: Collaboratively Score Post-tests with Your Grade Level Team and University Partner.** At the end of each unit, teachers worked in teams with either myself or my PD team to score the post-tests. This was an essential step for the six-step instructional design, as it was the culminating experience and opportunity to reaffirm a common 21st century language/discourse among fellow colleagues through group discussion. By scoring together at the end of the unit, it also provided rich opportunities to analyze student work together and provide consistent and robust feedback to students. This was important as students were also going through this experience for the first time, and having enough feedback to help them understand their learning and what their teacher was trying to engage them in or expect them to do was critical in aligning teacher practice with student expectations and outcomes.

Lastly, and most importantly, scoring the post-tests together allowed teachers to reflect on the adapted unit and the impact on their teaching and learning. The results drove what their next instructional steps would be and offered teachers a glance at what to expect in the next unit. Protocols for collaboratively scoring post-tests aimed to keep teachers reliable, valid, and consistent. See Appendix F for the “10 Steps to Reliable and Valid Scoring”.

## **The Document that Became "The Tool"**

### **The Global Capacities Framework: A Foundation**

Throughout each of the six-steps in the professional development process created for Parnell Schools, it was mandatory that teachers use a document called the EEF Matrix as the tool that would make their teaching more 21st century. The EEF Matrix was an adapted document from a previously created framework by my two colleagues and myself called the Global Capacities Framework (Choo, Sawch, & Villanueva, 2010). Teachers were part of creating the EEF Matrix, a document that provided the 21st century skills that were considered to be the most important and relevant to Parnell District. This matrix was created based on research I provided to teachers and our original framework. The original framework, called "The Global Capacities Framework" (Choo et al., 2010), was presented as a framework that modeled 21st century skills that were chosen based on both theoretical research and real classroom observation data collected from five high-performing education systems from across the world in Finland, China (Shanghai), Australia, Canada, and Singapore.



*Figure 16. Global Capacities Framework (Choo, Sawch, & Villanueva, 2010)*

The Global Capacities Framework was founded on research that included: various frameworks that focus on 21st Century Skills, 21st Century Thinking Habits and Dispositions, Participatory Engagement in the 21st Century, Media Literacy, Digital Literacy, New Literacies, Creativity, Cosmopolitanism, Global Citizenship, and Critical Thinking. In addition, my colleagues and I traveled the world, visiting countries that scored in the top four positions on the Program for International Student Assessment (PISA). Those top five countries were Singapore, China (Shanghai), Finland, Australia, and Canada. During our time in these countries, we visited the top-performing schools on the PISA. We visited classrooms and observed both teachers and students for 14-21 days consecutively to research the daily and best practices of their teachers and students. Our goals were to see in these five countries:

- what they were doing on a daily basis in the classroom
- what they valued about education
- how they prepared their educators to become teachers
- how they engaged their students; what they engaged them with and why

and how these four objectives influenced or impacted their rank on yearly PISA assessment results.

Utilizing the theoretical research and observations collected from our travels to these five countries, we created the Global Capacities Framework, which we believed encompassed the most important skills and dispositions needed to be active and contributing citizens in the 21st century. There are four large categories that include four smaller subcategories within them.

### **The EEF Matrix: Specially Created by and for Parnell School District**

Since the Global Capacities Framework was presented as a model (both visually and content-wise) framework for 21st century skills that merged theory and practice, it



was unsurprising to see the EEF matrix take on a similar visual representation and inclusion of capacities after the teachers at Parnell School District started creating their own adapted version. The EEF Matrix consisted of five large categories that ran horizontally across the top of the table: Critical Thinking, Creative Thinking, Collaboration, Communication, and Global Thinking. The Critical and Creative Thinking categories were easily determined by teachers as essential for students to have not only in the 21st century, but presently and in the past. Teachers argued that Critical and Creative Thinking were not "new" 21st century skills, but rather skills that have been necessary since many centuries ago.

Under each of the five categories, there are four "capacities" running vertically that represent the individual dispositions and skills that provide the opportunities needed in order to engage in the broader category. These capacities are often skills and/or ways of thinking that promote the larger terms of Critical Thinking, Creative Thinking, Collaboration, Communication, and Global Thinking. For instance, under Critical Thinking on the EEF Matrix, the following skills and ways of thinking are listed: Interpreting, Analyzing, Evaluating and Justifying, and Synthesizing and Applying. All of these skills require students to think critically. They also challenge teachers and students to observe the nuanced differences between each skill and how they impact an individual's ability to think critically.

Each of the skills on the EEF Matrix is housed in a box on the table, divided by solid black lines. Although the table implies that each box is a discrete skill, since the boxes are separated by solid black lines, it is more appropriate to visualize the matrix with dashed lines dividing each column and row to represent the porous nature of each of the five large categories and capacities below. It is important to note that when an individual is explicitly engaging in one capacity, it is most likely that he or she is implicitly engaging in another capacity. For instance, if a teacher were to provide

opportunities for students to "Engage in Real World Problem Solving" (first capacity found in the Global Category), he/she might have students "design and research," and

Table 12. *EEF Matrix Adapted by Parnell School District, 2010*

Critical Thinking	Creative Thinking	Collaboration	Communication	Global
<b>Evaluating and Justifying</b> Students will be able to identify and clearly define authentic problems and significant questions for investigation while citing appropriate evidence to justify conclusions .	<b>Imagining</b> Students will be able to imagine new directions/approaches (including alternate, divergent, and contradictory ideas) to solve a real world problem.	<b>Engaging in Collective Intelligence</b> Students will be able to work as a group towards a complex problem that can only be solved through the collaboration and various expertise of each group member.	<b>Projecting</b> Students will be able to choose the most effective medium for the message, use knowledge and information interactively to share important information with purpose to impact readers/listeners/receivers.	<b>Engaging in Real World Problem Solving</b> Students will be able to utilize inter-disciplinary knowledge that involves deriving a new, innovative solutions to a real-world problem requiring students to synthesize knowledge.
<b>Interpreting</b> Students will be able to accurately <i>interpret</i> and demonstrate a deep understanding of the issue.	<b>Simulating</b> Students will be able to create models and simulations to explore complex systems and issues to identify trends and forecast possibilities.	<b>Engaging in Distributed Cognition</b> Students will be able to negotiate various person(s), digital tools, applications, digital mediums and environments to accomplish a specific objective	<b>Reflecting and Meta-Analysis</b> Students will be able to reflect, analyze and evaluate on progress of learning and implications for new learning	<b>Engaging in Global Issues</b> Students will be able to analyze ethical, economic, political, scientific & cultural issues affecting the world internationally and the transnational implications for humanity. This may lead to contributions of new ideas for advancing humanity.
<b>Analyzing</b> Students will be able to <i>deconstruct</i> a question or problem by identifying appropriate strategies, data sources, analogous examples and <i>underlying assumptions</i>	<b>Innovating and Transforming</b> Students will be able to identify and explore unique ideas, novel ideas, and original formats to solve a real world problem and/or transform existing ideas, knowledge and solutions into new ideas, products, and processes	<b>Suspending Judgment</b> Students will be able to suspend judgment to a high degree in order to grapple through complex issues	<b>Rationalizing and Contextualizing</b> Students will be able to apply and rationalize different mediums of communication in various contexts/environments to work in concert to accomplish a specific objective	<b>Perspectivizing</b> Students will be able to engage in an original empathetic response informed through examining an issue from multiple perspectives (e.g. alternate theories, possibilities, other absent sources).
<b>Synthesizing and Applying</b> Students will be able to demonstrate flexibility in <i>integrating</i> and <i>applying</i> personal, collective and generated knowledge to a novel application.	<b>Design and Research</b> Students will be able to engage in a design process involving modeling while conducting research using a variety of research tools, methodologies and various information	<b>Risk Taking &amp; Tolerating Ambiguity</b> Students will be able to negotiate problems when no obvious choice exists among a wide range of possibilities; this opens space for adaptations, further explorations, and risk-taking.	<b>Connecting and Applying</b> Students will be able to communicate with others globally seeing oneself as an individual, part of community and the greater world.	<b>Engaging in Multiple Modalities</b> Students will be able to engage in original combinations of two or more modalities requiring students to understand and go beyond the potentialities of each modality to solve a problem.

"imagine" new possibilities in order to create a viable/possible solution to a real world problem. Although the teacher was explicitly trying to teach students how to "engage in real world problem solving," students also engaged in "imagining" and "design and research" from the Creative Thinking Category. Thus, it is important to note that all of the capacities and categories can merge into one another at times and have been fit into a 5x5 table for organizational purposes only.

Listed below each capacity is a student outcome briefly described through key words and phrases. This was created so teachers could begin to create a common language and understanding of what each of these capacities meant to them and what it looked like when students were engaged in them. By providing student outcomes, teachers were prompted to consider "what" the student had to "demonstrate" in order to engage in the chosen capacity.

### **How It was Created**

It was clear from the very start that Parnell School District was already a place where teacher autonomy was evident across most of the district. Teachers could choose how they planned to meet the state standards and were given free rein to adapt their curriculum as they saw fit. They were also celebrated for their good work by administrators on an ongoing basis and were often called upon for their opinions when decisions were being made at the administrator/community level. The teachers at Parnell were cared about and respected. Keeping that in mind, it was important not to create anything "new" without the input or involvement of the teachers, who were either to be part of the initiative or were just interested in talking about successfully creating students of the future and good education. So the two following goals acted as the foundation for how the EEF matrix was created and the kick-off to the professional development initiative.

- Base it in research to merge theory and practice, not just experience and opinion
- Make it organic and built from the ground up with the teachers' input

My goals for the process of creating the EEF Matrix provided opportunities to ensure that teachers would take ownership for their thinking, reflecting, and decision making. It also made it possible for teachers to be part of building the crux of the initiative so that the professional development they were about to receive did not seem like:

- an add-on
- an external program being imposed on teachers that had nothing to do with their daily instruction
- an initiative that was being forced down from their school administrators
- district administrators who were "out of touch" with the daily experiences of a classroom teacher.

Rather, I wanted to ensure that teachers felt:

- autonomous in the decision-making process of what they were about to participate in through PD in the upcoming year
- intelligent and knowledgeable by engaging in opportunities that treated them like professionals (discussing and understanding theoretical/abstract research)
- inspired that they were trailblazers in their profession and part of an integral paradigm shift in how to think about teaching, learning, and education as a whole.

As the entire district was to begin professional development, it was important to hear the voices of teachers from as many grade levels and disciplines as possible, if not all.

## **Creating the EEF Matrix**

**Dissemination of the Research.** More often than not, teachers are able to draw on their classroom experiences to make predictions, interpretations, interventions, and solutions to various situations that arise in their classrooms. Many practitioners need only to "remember" and "reflect" on what happened before and attempt to solve a problem or address an issue based on past experience. Scholars, on the other hand, who may not have ever spent a day in a classroom, are often the authors of articles, books, guides, policies, and the list goes on, providing solutions to those very same problems and issues. This is one example of a disconnect between theory and practice. One side of the coin is based solely on experience, and the other is based solely on theoretical research. As the professional development program at Parnell School District was founded on a university/school partnership, it was only natural to build a bridge between theoretical research and practice to inform the various facets of the PD.

Thus, at the start of the initiative, I completed a literature review on 21st century thinking skills, habits, and what it meant to be a global/cosmopolitan citizen of the 21st century. From that review, main points and examples of 21st century thinking frameworks were paraphrased and teased out to create a shorter, more digestible document for practitioners to read. This was done purposefully, understanding that the practitioners involved were already extremely busy with daily teaching duties and would benefit most from the concepts and ideas that would eventually become, or had the possibility to become, concrete examples in their classrooms. I hoped that the synthesized document would maximize the number of teachers actually reading it.

The abridged research document was then distributed across the district. However, volunteer teachers who self-selected to be part of the "EEF Matrix Committee" were assigned the task to read the document and decide on five skills or ways of thinking that

they thought were the most important for their students to possess in the 21st century and/or during their time at Parnell School District.

**Making Sense of the Research Through Informal Group Discussions.** Four lunch discussions were created. The first meeting included teachers from the elementary level, and subsequent meetings included teachers from the intermediate, middle, and high school levels. The meetings took place during a 2-hour release break where lunch was served and teachers, administrators of their schools, and the university partners could discuss the research they had read and discuss the top five choices of each teacher. Most groups included 20 + teachers.

**Providing Teachers Opportunities to Voice Supported Opinions and Concerns.** During the 2-hour lunches, Ted Scots, myself, and three PD assistants facilitated each meeting of 20+ teachers. Building administrators were purposefully asked not to attend the meetings. It is known that the individuals in a room affect one another with respect to who feels comfortable or uncomfortable to speak based on who is present. Taking into consideration that building administrators (principals and vice principals) might formalize the environment or feel coercive (IRB) to some teachers, it was decided that they would not attend the meetings to give teachers an opportunity to share their opinions, concerns, and a platform to speak freely.

Although Ted Scots was present at the meeting, there was a certain sense of anonymity between him and the teachers that was not possible to attain with the building administrators present, as he did not know the teachers on a day in and day out basis. At times, he was not aware of teachers' names, not to his fault, but for the sheer number of teachers there are in the district across grade levels and disciplines. The teachers could also engage in the lunch discussions with me and my PD team with some anonymity since we were meeting them for the very first time. In addition, we did not know any past history on any of the teachers that attended the meetings, so there were no predisposed expectations imposed on any teachers. Although we brought with us a sense of unknown

as we were "strangers" from the "outside coming in," we made a very conscious effort to do the following in order to set the environment for discussion:

***Build Confidence.*** I intentionally tried to create a safe platform for teachers to speak by explaining to teachers that everything said in the room would be kept confidential (no names on papers collected, no names given for introduction, no voices identified on any recording devices or transcripts, etc.) and reassure teachers that there was "no right or wrong answer."

***Value Voices and Instill Agency.*** I explained that it was a safe space where their opinions were valued and needed, in hopes of instilling agency within teachers that what they shared today would make an impact on the upcoming district-wide initiative.

***Accurately Represent What Teachers Said.*** I reminded my PD team of the extreme importance to listen to teachers and take notes on the board so teachers could see how they were being represented in print, ensuring no miscommunication or misunderstandings were being recorded;

***Emphasize the Partnership and Highlight the Joint Nature of the Project.*** I explained to teachers that the university partners were there to work jointly with the faculty (to assist, to challenge, to engage, to inspire) and not just to implement a program because it needed to be done.

These four ideas were repeated several times for teachers throughout each lunch meeting so teachers would become more comfortable with the idea of sharing their ideas and voices.

***Capturing the Discussions and Offering Interpretations.*** Throughout each of the discussions, similar areas of concern and questions arose from teachers. Teachers shared some of the difficulties they encountered as they themselves navigated through the research articles and raised concerns:

I mean, don't get me wrong here, this is all great, I really enjoyed it and I mean, I think I even learned a lot. But, I mean, I had a difficult time combing



through this. I don't know how my 2nd graders, or even 11th graders for that matter would get this. (Interview, Sarah Walker, 2011)

*Appropriate Language for Younger Students.* Teachers discussed the rich, yet difficult, vocabulary they encountered as they traversed the various frameworks and passages. They wondered how their students, who were younger and less educated (in terms of years), than they would understand what they would eventually be teaching in the classroom if they were encountering difficulty with the way in which "anything related to 21st century skills/thinking" was being explained. They questioned whether it was appropriate to speak to younger children in such a manner (teaching something too abstract, wasting time on explaining in language appropriate for children, too much time explaining, the abstract nature of things that can't be made concrete, or that they couldn't envision as concrete, as yet).

By sharing that they "enjoyed reading" the articles and "learned a lot" from the research, "but" teachers strategically placed themselves in a position where they demonstrated to the assistant superintendent (ultimately their boss) that they weren't exactly saying "no" but they weren't exactly saying they were on board. They neutralized their stance, making sure not to implicate themselves in any way so that they could be accused of not participating or refusing to jump on board, but at the same time providing a reason for not jumping on board if the district suddenly decided to take a different direction on the initiative.

As teachers expressed that they themselves were not sure of what things meant by using their students as examples of not being able to understand, they re-directed the fact that they didn't understand what was being explained in articles and any potential work they might have to do to learn some of the difficult concepts, in hope that if concepts were too difficult for students, there would be no point in teaching or learning about them, since their focus, as teachers, is of course the students. Teachers took a stance where they were doing the most important thing in education, which was focusing on the

children, where in reality they were attempting to shirk the responsibility of lifelong learning as educators because the obstacle of "difficulty" was now in their way. In short, difficulty equated to lack of time and frustration. Something that is not motivating to look forward to, if an individual cannot see the benefit that wading through the difficulty would offer them in the future.

Going off of what Janice is saying, I totally agree that this is good teaching, but it just feels like we're not going to have enough time for all of this (Interview, Julie Froller, 2011).

Teachers were concerned about the possibility of time being taken away from them. By having to spend more time on explaining, teachers directly correlated time being taken from their usual instruction time with leaving them even less time to cover everything they had to cover in a day, week, month, or year. Some teachers reacted personally responding,

if you're telling me I *need to teach* 'these 21<sup>st</sup> Century Skills' that must mean, I'm not already teaching 'these 21<sup>st</sup> Century Skills', in turn that must mean I'm not doing my job properly as a teacher, so I guess I'm being reprimanded and 'made' to do what I am apparently not doing! (PD Discussion, Hilda Prentice, 2011)

***Differences Based on Disciplines.*** The 2-hour lunch meetings, and meetings held from that day forward, offered an opportunity to share with teachers certain characteristics we aimed to include in the EEF Matrix once all of the teacher input/feedback and research was amalgamated to create the final document.

Okay, so is there a different matrix for each grade level and each discipline? Because what I think this means in English is going to be completely different from what Joseph thinks it means in Science (Interview, Josh Drig, 2011).

One of those characteristics was the transferable nature of each of the skills. Eventually the transferability of each of the capacities would be referred to as the "cross-disciplinary" nature of the capacities.

*Cross-disciplinary* meant the potential capacities included on the EEF matrix were not to be looked at as something that had to include two or more academic areas of study, but rather to engage in a capacity in one academic discipline and engage in that exact same capacity in another academic discipline just as easily. The transferable nature of the capacity from one discipline to another would offer teachers and students an opportunity to learn something in just one subject area but be able to utilize it in any.

*Interdisciplinary* meant consciously including two or more academic areas of study when teaching, creating, or assessing. This limits students by having to engage in a capacity or learning opportunity where a subject area is defined. Therefore, the capacity is specifically used for that subject area and may not be transferable to another discipline. Teachers provided opportunities for their students through the activities they created.

You know, I have this really bad feeling that our kids are going to get pigeon-holed in some of this stuff. You know, Tommy's really good at "Imagining" but bad at "Analyzing" or he didn't even get to "Perspectivizing"! So what do we do about that? How do we ensure we're getting everything and Tommy's not "Imagining" for the next 13 years? (Interview, Justin, 2011)

***Pigeon-holes.*** Teachers shared concerns about how the EEF Matrix might negatively impact their students by labeling them with capacities that they either excelled or needed improvement in. They also expressed concern about who would be held accountable for which capacities. Lastly, they shared a glimpse at some of the fear they had toward unknown capacities they did not fully understand as of yet, in particular, "perspectivizing." By emphasizing "perspectivizing," through a voice inflection, teachers demonstrated that they were unsure of the definition, brushing it off as something nobody should technically know, as there had been no reason to know its definition in the past. The emphasis on "perspectivizing" also solidified that teachers were looking to

administration to provide the supports needed to help them understand it. Teachers took the bottom line that they weren't going to learn anything new on their own dime. Unless they were supported, it wasn't going to happen.

How do we keep track, and who's going to be held accountable for which capacities? (Interview, Tom Geof, 2011)

Embedded in teachers' comments was genuine curiosity of who would be assigned to teach which capacity. They were attempting to gauge the situation and inquire, indirectly, just how much work they, themselves, would have to do once this initiative began. They were curious to find out what types of pressure were going to be added to their already overflowing plates.

At the same time, based on experience, teachers indirectly foresaw that they might feel inclined to avoid the capacities they didn't understand, skip the ones that were too difficult, and/or take too much time. Teachers comfortably rely on what they know. A reason for this is the affirmation of "knowing what they're doing" after completing a task successfully. It affirms that they are a "good" teacher. Success is addictive, for very good reasons, and something teachers want to experience often. This, however, can easily turn into teachers targeting the same capacities that bring them success and never venturing on to other capacities they may be unsure of.

***Coming to Consensus: The Different Probabilities.*** As mentioned earlier, each teacher was asked to choose his/her top five skills or ways of thinking that were either included in the research document distributed prior to the meeting, part of the original Global Capacities Framework, or that they thought were the most important for their students to possess in the 21st century and/or during their time at Parnell School District. Each teacher was then asked to write each of their five selections on five separate post-it notes and place them under one of the five large categories listed on the board. The five large categories were brought to the meeting and chosen by the assistant superintendent or suggested by the university partners based on the goals the assistant superintendent

had for the district. The five large categories included: Critical Thinking, Creative Thinking, Collaboration, Communication, and Global Thinking. At each 2-hour lunch meeting, teachers posted their selections under various categories. They discussed what each of their selections meant to them by providing possible definitions when asked to explain, and debated the similarities and differences of selections if there were any overlapping or drastically different choices displayed on the board. Each board of post-its (Elementary, Intermediate, Middle, and High School) was captured by photo in addition to the questions, concerns, and definitions discussed throughout the meeting.

The university partners then took the selections of all of the teachers involved in the 2-hour lunch meetings, grouped together capacity selections under categories based on majority, and looked for emerging patterns and trends. What the university partners noticed about the teacher selections were the following:

*Same Choices/Same Definitions.* Teachers chose the same capacities by name and offered the same definitions as their colleagues.

<b>Synthesizing and Applying</b>	<b>Synthesizing and Applying</b>
To be able to take multiple pieces of data, make sense of it, summarize and connect them and apply them to create a viable conclusion.	Reading several pieces of text and creating a cohesive synopsis of all of them and then applying them to a final project or essay.

*Different Choices/Different Definitions.* Teachers who chose different capacities by name also offered different definitions of each capacity from their colleagues.

<b>Synthesizing and Applying</b>	<b>Design and Research</b>
To be able to take multiple pieces of data, make sense of it, summarize and connect them and apply them to create a viable conclusion.	Creating a plan for research. Including all the steps, creating a hypothesis, materials, goal, steps, results and conclusion.

*Same Choices/Different Definitions.* Teachers who chose the same capacities by name provided different definitions to each capacity even though they were calling them the same thing.

<b>Analyzing</b>	<b>Analyzing</b>
Finding a common theme throughout various pieces of literature. Critically connecting it to something.	Succinctly interpreting something. Summarizing and including them in your final argument. Making references.

*Different Choices/Same Definitions.* Teachers chose different capacities by name but were providing the same definitions to each capacity even though they were calling them different things.

<b>Engaging in Real-World Problem Solving</b>	<b>Engaging in Global Issues</b>
Trying to find a solution or answer to an authentic problem in the world today.	Looking at an issue in the world today and giving a viable solution.

With all of the variables that presented themselves as the teacher selections were aggregated and sorted, it was necessary to consider what each of the teachers meant, opening up possibilities for interpretation by the university partners and keeping as rooted in the research as possible. With that in mind, the university partners grouped *Same Choices/Same Definitions* as the most likely to be included in the matrix; *Different Choices/Same Definitions* as additional options to choose from for each of the five categories if there were not enough capacities in a category by the end of the sort; *Same Choices/Different Definitions* as not-usable for the matrix, but a specific area to address through PD at the start of the initiative (this was an important goal, so common language could begin to be cultivated from the start of the initiative and any discrepancies in definitions or understandings would be cleared up before the initiative really began); and *Different Choices/Different Definitions*, depending on how divergent definitions were, were treated the same as *Same Choices/Same Definitions* selections. They were treated this way because the university partners believed, through discussion and reflection, that teachers would probably be able to reach compromise on changing names of a capacity moreso than changing definitions of a capacity.

Based on these results, the first draft of the EEF Matrix was created by the university partners based on the 2-hour teacher lunch meeting selections, the assistant

superintendent's overall goals for the district, the research, and the original Global Capacities Framework (Choo et al., 2010) (see Figure 15).

### **Celebrating the Final Document: Recognizing the Voices Involved in Creating It**

The first draft of the EEF Matrix was distributed to the teachers who attended the 2-hour lunch meetings first. They were sent a document directly from the assistant superintendent. The first portion of the narrative described the current landscape of education and assessment in the United States, drawing attention to the "crisis at hand."

It's been well over a decade since the 21<sup>st</sup> Century began, and yet, the never-ending discussion about identifying, teaching and assessing the skills necessary for this century continue. National standards and exams are developed. Outrage at the attack on the concept of federalism puts that movement on pause. State exams are redesigned and administered. They continue to woefully miss the mark. At the current rate, it might be wise to punt the 21st Century and begin working on the skills necessary for the 22nd Century (Ted Scots, 2011)

The next portion of the document was a playful call to action. His narrative helped readers envision the future of Parnell School District: "The public looks for an outlier, a pioneer to emulate." The final portion of the document highlighted the potential successes and goals Parnell School District aimed to achieve. This part of the narrative was written to inspire teachers to be part of a special movement, a paradigm shift in the way education was to be thought of. The narrative enticed educators to sign on to an initiative worth signing onto.

And now, in the year 201\_\_, this district not only works innovatively as a professional learning community.... The most dramatic impact of this K-12 approach is that teachers have a very clear, concrete picture of the types of tasks and types of thinking that will be required.... As a result, teachers skillfully and mindfully plan instruction to equip students.... The education nation continues to spin its wheels in the mud. However, very quietly, a small district has identified critical learning outcomes for the 21st Century, how to teach them, and now, how to measure student growth (Ted Scots, 2011).

Ted Scots demonstrated what it meant to inspire and lead his faculty to be part of an authentic and necessary change in education. By sharing his vision, involving his faculty in the decision-making process, and adding substance to his reasons with sound research, a clear message was articulated to the district, marketing the initiative as worthwhile and meaningful.

The EEF Matrix was then distributed to the district's Curriculum Instructional Leaders (CILs) and building administrators. An additional e-mail was then re-sent to the entire district faculty re-inviting teachers to be part of this exciting new initiative.

Hello all,

First let me thank you for volunteering to participate in the development of the EEF Project this year. In order to hear the first hand experiences of our teachers this year, you are invited to join us for a Q & A on Wednesday at the high school.

We will meet as a group sometime after 2:00. You will receive confirmation of the time and location in the high school sometime later today. This email is intended to give you some advance notice in the hopes that you could join us on Wednesday. Your attendance is not required to be a part of the project this year, but, it will certainly give you a window into the experiences of the teachers involved this year.

Stay tuned for an email on later today with the specific time and location,

Ted

There was response from teachers of all grade levels, disciplines and levels, who wanted to part of the new initiative. Teachers responded wanting to join because they were inspired by the narrative; sincerely enthusiastic and curious; opportunistic--considering possibilities for their own promotion; genuine--signing on to continue their lifelong learning goals; feeling pressure to join because it was sent by the assistant superintendent; and finally not exactly sure what they were signing on for, but they'd try it for now, and if it didn't work out, they'd drop out later. For whatever reason, there was a great response from the district. Shortly thereafter, a PD schedule was put in place for the initiative and implemented district-wide with the first group of volunteer teachers.



## **Implementation of Professional Development**

### **How Parnell School District Implemented District-wide PD**

It was apparent that engaging in professional development opened up many different modes and versions of what sessions could look like. Professional development can take on various models across professions. Oftentimes, professional development can be offered outside of the workplace where employees attend a workshop, conference, or meeting led by an external party over a day or several days. Attendees network with others in the profession, take notes, and return to their daily work routine with the goal that they will utilize their new-found knowledge. Other models include pushed-in professional development where "experts in the field" enter the workplace, often hired by the company's employer, and provide professional development to employees during a lunch hour, a professional development day, or after work hours. In some instances, the expert may enter the actual site of work and model what needs to be learned so the employee can observe in real, authentic time.

At Parnell District Schools, the administrators and I decided on a push-in professional development model that would target Parnell teachers during lunch hours, planning times, after school, and on professional development days. Learning from the 2010 pilot study administered at Parnell where teachers received professional development by being pulled out of their classrooms twice a month, Parnell administrators decided pushing in on teachers' "free-time" would be less disruptive to students' learning over the course of the year. In addition, they believed teachers would feel less overwhelmed by not missing a full day's worth of instruction when they were engaged in professional development, emphasizing the notion that the "content that needed to be covered." Studies show that when a teacher is pulled out of his/her classroom more than seven times in one academic year, it is detrimental to the students' learning experiences.

The university team of professional development facilitators arranged weekly visits to grade-level groups of teachers via e-mail. At certain times of the year, visits were missed due to weather, holidays, or unforeseen circumstances.

In year one (the pilot), teachers were pulled out twice a month from January to May from 8-3:30 PM and attended an intense 4-day consecutive scoring workshop in June from 9-4 PM.

In phase I (2011-2012), teachers in 2nd, 5th, 8th, and 11th grade met on a weekly basis from November to June during lunch hours and planning times.

For each grade level, the curriculum instructional leader and university contact set up a time where the team could meet consistently for an approximately 1.5-hour block on a weekly basis. At the elementary level, teachers often combined a lunch hour with a back-to-back planning time, piecing together two 40-minute periods.

At the middle school level, teachers of similar disciplines received "curricular partner" time twice a week for 1.5 hours where they discussed curricular planning. One of the two time slots was devoted to professional development on a weekly basis.

At the high school level, there were no common planning times or lunches. Therefore, on a rolling basis, individual meetings were created, changing weekly based on the university facilitator's and teachers' schedules.

<b>Time</b>	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>
<b>7:30AM</b>					
<b>8:30AM</b>					
<b>9:30AM</b>	Check-in meeting with Assistant Superintendent (weekly, if possible)	<b>Grade 8</b> 4 teachers ELA, SS (Bi-weekly)		<b>Grade 8</b> 4 teachers Science, Math (Bi-Weekly)	
<b>10:30AM</b>					
<b>11:30AM</b>					
<b>12:30PM</b>	<b>Grade 2</b> 6 teachers (weekly)		<b>Grade 5</b> 8 teachers (weekly)		

<b>1:30PM</b>					
<b>2:30PM</b>	<b>Gr. 11</b> 2 teachers Science (Weekly)			<b>Gr. 11</b> 3 teachers Humanities (Weekly)	
<b>3:30PM</b>					
<b>4:30PM</b>					

*Figure 17. Example of Weekly Professional Development Schedule*

### **Effectiveness of Professional Development Programs**

The effectiveness of professional development is based on more than just how good the professional development provider is. There are several factors that contribute to whether or not professional development will be successful in a variety of settings.

Some of those factors may include:

- Effectiveness of the facilitator (top down mandates vs. cultivating trust with PD participants as "one of them")
- Readiness and willingness of the participants (ownership)
- Applicability and relevance of the professional development (importance, agency in teachers)
- Support provided during and after professional development
- Balance between success and challenge provided during professional development (self-efficacy).

Based on the experiences at Parnell School District, these were the top five factors that played major roles in whether or not the PD was effective. The top five factor codes were created from the literature and data analysis. First, as I read widely through a variety of research on successful PD initiatives, similar indicators of success emerged from across studies. In addition, as I analyzed my data, similar factors found in the literature emerged from my analysis. I cross-checked the factors that emerged from my data with the success indicators found in the literature and prioritized the five most important indicators based

on the number of times the indicator surfaced. It is essential to note that these five factors were distributed throughout the professional development process and did not occur in one isolated time. It was necessary to consider the professional development model implemented at Parnell District Schools in terms of before, during, and after to elicit the most detailed look at this PD model. For this particular case, the five factors discussed above will be presented in relation to the following timeframes.

- **Before:** Pre-planning and groundwork that occurred before PD began
- **During:** Maintenance required as PD ensued
- **After:** Strategic follow ups required after PD was complete

Coding Color	Coding Theme	Aligning to Learning Theories and Theories of Successful PD Programs
Yellow	Effectiveness of the facilitator	High Stakes vs. Low Stakes
Green	Readiness and willingness of the participants	Teacher Ownership and Autonomy
Blue	Applicability and relevance of the professional development	Overall Importance and Relevance: Teacher Agency
Pink	Support provided during and after professional development	Environment: Context
Purple	Balance between success and challenge provided during professional development	Self-Efficacy

*Table 13. Coding Schema for a Professional Development Program*

### **Gaining Trust: The Circumstances of Getting to Know One Another**

**Introductions at Opening Convocation.** The first condition was one of the most obvious variables that directly impacted the effectiveness of professional development programs, or any learning scenario. There are countless memories stored in an individual's mind of the various times he/she sat in a classroom to listen to someone "teach" them something. After sorting through all of those experiences, there were probably times where the speaker was animated, interesting, and engaging, providing the individual with a fond memory of learning and other instances where the speaker was

boring, difficult to hear, and/or uninteresting, providing the individual with partial or negative memories of learning. In both instances, the individual remembers the experiences, but most likely only learned something, or took something away, from the first type of memory.

This does not come as a surprise, as the relationships that occur between speaker and listener directly correlate with an individual's want to learn. The three variables that impacted Parnell School District's PD initiative in terms of facilitators were: (a) the interpersonal characteristics of the facilitator; (b) the conditions that brought the facilitator to provide the PD; and (c) the external/internal relationship to the teacher faculty.

It was important to note that I played multiple roles throughout the initiative. I was both a PD facilitator and participant researcher at Parnell District Schools.

At the beginning of the initiative, it was Ted Scots's goal to integrate me and my PD team into the school district as "critical friends." Scots made every effort to demonstrate to the teachers in his district that the university partners were invited by him to "enter" the district. He modeled the relationship he hoped his teachers would have with me and my team. As an external party, this played an important part in cultivating a first impression with the teachers across the district. Ted Scots made it clear that my team and I were not imposed on the district by larger authorities (federal government, DOE). This helped diffuse and lessen feelings of resistance from teachers to top-down policies and mandates from the government, a long-time disconnect across education between practitioners and policymakers.

We were invited to attend the opening convocation in August for teaching faculty. Here, they were introduced to all the employees of Parnell School District: teachers, support staff, custodial staff, administrators, everyone. The opening convocation was a kick-off meeting, a rally of sorts to excite faculty for the coming year, inspire teachers for being in the profession of education, celebrate individuals for their accomplishments

from the previous year, and build a solidarity across the district – across all employees, including non-teaching faculty. It was an event to motivate and bring awareness to the importance of all the parts that made up the whole.

We score in the top 3 districts across CT in the CAPT and CMT, We already have a fantastic faculty that has been recognized for..., we already know how to ... but now we want to see what more we can do? We don't get funding from RTT, so it's up to us to see how we can become better.... I've invited a group of folks from Teachers College at Columbia University to help us on this journey ... over coffee and pastries we started talking ... Jerry and I thought it would be perfect for our district ... now here they are ... can you stand up, way back there ... we're on e-mail all the time, yesterday I had an idea at 2AM in the morning so I e-mailed Alison and I got a response in 2 minutes! I said, I like these people!... They're all teachers too, so most importantly they want to work with you. They know what it's like to be on the front line ... so that's something to look forward to this year and thanks for coming TC. (Opening Convocation, Ted Scots, August 2010)

By being invited to the opening convocation, my team and I were "vouched for" by the assistant superintendent as "critical friends" and, more importantly, his direct "friends." As Ted modeled the relationship he had with the university partners, it offered teachers across the district a glimpse into the characteristics of that relationship. By observing the relationship, teachers were introduced to the university partners as positive, highly qualified, existing friends of the administration whom were already trusted, non-threatening as teachers from a previous lifetime, and, most importantly, not part of a top-down mandate that was being enforced.

**Volunteers and Testimonials of Colleagues.** Although we, as facilitators, were welcomed into the district and introduced, most thoughtfully, as non-threatening individuals, it was still a fact that we were not internal members of the school district but external visitors. It was impossible to clear me and my team completely of any threat to the existing teaching faculty. Knowing this, it was a goal for both me and Ted to initially call for volunteer faculty. The reason for calling on volunteer faculty was two-fold: first, to build a group of teachers who would successfully complete the PD, and second, to create advocates for the PD.

It was necessary to ask for volunteers so teachers were not feeling forced to do anything they did not want to do or were unsure of. Volunteer teachers were more likely to demonstrate higher levels of self-efficacy by wanting to be part of a new initiative (although this was not always the case), be more flexible in offering their time (giving up a planning time, lunch period, or meeting before/after school), and willing to try something new, traverse unknown/new territory, and/or change their existing practice.

Cultivating a team of volunteer teachers to work with us offered both parties opportunities to create relationships with less doubt and skepticism at the forefront and get straight into the work with fewer logistical difficulties (teacher availability) and highly motivated individuals willing to undergo change if necessary. What resulted in the initial phase of working with the volunteer teachers was paramount. My PD team and I were now personally vouched or deemed "okay" by 20 more teachers and the assistant superintendent.

As the initial group began the professional development process, professional relationships were cultivated. Teachers and I could call each other by name, knew of the daily struggles and successes of one another, created like goals, and worked as a team to achieve success. The initial group of volunteer teachers, my PD team, and I became a larger team and willingly supported one another. The 20 volunteer teachers also reached a point of being comfortable enough to introduce the university partners as their fellow colleagues/friends. We had achieved becoming "one of them" (teachers) as best as we could.

***Twenty Teachers Became Advocates for the Professional Development Initiative and Offered Their Testimonials of Experiences to Their Colleagues to Help Recruit More Teachers.*** This is probably one of the most critical outcomes of calling for volunteer teachers. After engaging in the PD process, 74% of the volunteer teachers became agents of the PD initiative. As they were most willing to change, learn something new, or be flexible, many of them experienced some sort of change by the end of the PD

process. (Later, I will discuss deep transformative change.) In turn, they became advocates for the initiative and often provided their testimonials of change to their colleagues, at meetings, in public forums, etc. One teacher remarked, "I will never go back to the way I used to teach," while another joked, "Once you've tried EEF, you won't be able to look at what you do on a daily basis in the same way. It changes everything. For the better that is."

My PD team and I could now look to these teachers not only as advocates for the district-wide initiative, but also as advocates for our PD team. This new sense of agency in the teachers provided us a direct link to other teachers across the district who were apprehensive or unsure of the PD initiative. By allowing the teachers to speak to other teachers who had not yet engaged in the PD of their experiences, they acted as recruiters for the initiative.

***Beyond the Volunteer Teachers.*** Utilizing the initial volunteer teachers as recruiters was only one step to ensuring the effectiveness of the facilitator. Although the induction of the facilitator was a key variable in ensuring an effective facilitator, it was also necessary to consider the interpersonal characteristics that impacted how teachers acted, reacted, engaged, and responded with the facilitator. Throughout the professional development sessions held across the district, it was imperative that I, as facilitator, be an active participant in their weekly meetings and take on a portion of work along with the teachers in attempt to "lessen the burden of work" for teachers when possible.

Taking on some of the "homework" or weekly responsibilities involved in the PD sessions not only helped lessen the burden of work for the teachers involved, it provided teachers a sense of unification or solidarity where I became "one of them." Dividing the work up equally on occasion reinforced that I was there to help them and not just to tell them what to do. Since I purposefully offered to take on work "on occasion," the "facilitator/learner" relationship was still maintained to keep a balance in the PD sessions where I could still be considered the "expert" in the field, with the teachers as "learners."



Also, when I took on some of the work on a case-to-case basis, it demonstrated to teachers that the work they were doing was "important" and not just "busy work." It was work that needed to be completed, applied, and utilized and thus should be completed in a thoughtful manner by a deemed professional (either a teacher or university-level facilitator). By navigating back and forth between these relationship dynamics, a strong collegial relationship was cultivated between me and the teachers; in turn, my PD team and I, as facilitators, were viewed as effective.

**Knowledgeable, Relatable, and Engaging.** It was critical that the facilitator be knowledgeable in his/her field. If the facilitator was working with Science teachers, it was important that the facilitator was an expert in the science discipline in addition to the new 21st century thinking capacities the administration was attempting to integrate across the district. It also demonstrated to the teachers that they could call upon experts in the field who were knowledgeable and well versed in the work, creating a sense of security in the teachers that the facilitator knew what he/she was talking about when they came across something unfamiliar. It maintained the status quo of "teacher/facilitator has the answers," providing teachers with a sense of familiarity (their own teaching experiences as both a student and teacher) and confidence that they were a part of a PD initiative that was well researched and grounded in hard evidence, giving them confidence in the PD program they were involved in. All of these elements made the PD initiative official and legitimate to teachers. The affiliation with the University provided a "stamp of approval" in the world of "accredited" knowledge. It is important to note, however, that the facilitator did not promote a "transmitted" type of learning in the PD sessions; it was much more ground-up and organic.

Having been a current practitioner or educator in the past was also extremely important for the facilitator. It was necessary for the facilitator to build a bond of "similarity" with the teachers. The teachers needed to induct the facilitator, approving him/her, so to say, into their profession of education. Ensuring that the facilitator was an

educator helped minimize the skepticism of teachers and limit the tenuous situations that could arise during education-related discussions that stem from the disconnect between policymakers and practitioners.

As mentioned at the beginning of this section, the overall effectiveness of a facilitator also depends on his/her ability to set the tone of the PD session by being engaging, interesting, and demonstrating how what teachers are learning is applicable to them and their practice in order to maximize participant receptiveness. This is a direct example of passive vs. active learning (Gee, 2006). In any situation where an individual must learn something, there are two ways of viewing the learner. First, we can view the learner as a vessel, a vessel to fill with knowledge and for the vessel to remember, to transmit knowledge from point A to point B.

Second, we can view the learner as an active participant in learning who must engage in their learning by applying and doing what they are learning in authentic situations to make meaning of what they have learned. An effective facilitator would be someone who does precisely this. The PD facilitators steered away from lecturing, telling teachers what to do, what to remember and what to memorize. Instead, they engaged teachers in discussion, created authentic opportunities for teachers to engage in and apply what they were learning, assisted teachers to learn experientially and reflect on how their thinking or understanding changed or didn't change after learning something. By having active and authentic opportunities for learning, teachers perceived the facilitator to be effective, knowledgeable, and engaging. Teachers perceived that the facilitator impacted them directly when learning in this style.

***Help Mediate Between Teacher (Practitioner Needs) and Administrator Through Email, Requests, Offering Both Sides to the Story, etc.*** It was also important that we, the facilitators, play "middle-man" between the teachers and administrators. As the teachers acted as advocates for us when recruiting other teachers to the PD initiative, it was imperative that we return the same favor by acting as the teachers' advocates to

administration from time to time. The give and take of the relationship was critical in cultivating a bond of trust between the parties. At times, teachers were faced with obstacles and difficulties (lack of time, lack of space for meetings, overwhelmed with the amount of work involved, unresponsive colleagues, etc.) that necessitated administrator assistance. During these times, I or my team could offer to navigate the relationship they had with the assistant superintendent and request relief on behalf of the teachers and the PD initiative, hoping for the best or telling teachers that they would have to hunker down, put their noses to the grindstone, and muster through the situation. It was ultimately our call. If the request was granted by administration, the teachers felt empowered by their relationship to us and the assistant superintendent; relieved to receive some assistance; and content to be part of the PD initiative. If the request was rejected by administration, the teachers perceived a stronger relationship with us, as we were all in the same boat, both being rejected by administration; or more distant from us by grouping us in with administration and separating themselves as the teachers--returning to an administration vs. teacher mentality. In turn, their level of contentment with being involved in the PD initiative often decreased.

**Maintaining the Professional and Informal Relationship.** After the many phases of the PD initiative came to a close, I visited teachers' classrooms, on lunches, or in passing in the hallway to follow up. In some instances, I set up formal meeting times where the teachers could reconvene and reflect on how their daily teaching and individual learning were going now that the PD was over; in other instances, meetings occurred by chance and I took a few minutes out of the day to talk with teachers. By continuing the informal relationship, not connected to the content of the PD initiative, I kept a foot in the door with each teacher. This added to the effectiveness of the facilitator as it allowed for future possibilities and continued on the relationship of facilitator/learner to be transferred to other opportunities, rather than closing the relationship and deeming it a one-time experience.

## **Teacher Ownership and Autonomy**

**The Status Quo.** As discussed in the section above, teacher volunteers acted as a catalyst at the start of the PD initiative. The readiness and willingness of teachers directly correlated to their sense of ownership in the initiative and sense of autonomy. Providing teachers a choice right from the start whether or not to be involved in the PD initiative maintained high levels of teacher autonomy found throughout Parnell School District. Teachers in Parnell were used to making professional and pedagogical decisions for themselves, and they were used to being treated like professionals and in charge of their decisions as teachers, so it was only natural the PD would be *offered to* teachers and not *required*. It is important to note, however, that Parnell Schools is a district where motivation, self-selection, and self-initiative are traits that are readily found in high levels across the teaching faculty.

Having teachers choose to be part of a PD initiative provided teachers an opportunity to take ownership of their experiences. They self-selected to be part of the initiative, and so they were now in turn responsible for what they were doing, learning, using the PD for. They were in charge of making the decisions, so they owned what they made of it.

**Celebrating, Promoting, and Reinforcing Ownership.** Throughout the PD initiative, events and activities were put in place by the assistant superintendent and university partners to explicitly nurture ownership and autonomy in teachers. Most of the work (curricular documents, long-range plans, lesson plans, formative and summative assessments) created and utilized by teachers across Parnell School District were, for the most part, well written, up-to-date and a foundation for the work they would engage in through the PD. Pockets of teachers in various grade levels and disciplines did need to work on creating these pieces of work while concurrently engaging in the PD and were supported by the PD facilitators and Curriculum Instructional Leaders (CILs) in the

district. Often the teachers who needed this assistance were novice teachers (less than 3 years' teaching experience, although I must note that many new teachers to the district were well versed in creating these foundational pieces) or veteran teachers (teaching for 20+ years).

Acknowledging the existing work of the teaching faculty, as good foundational pieces that could be used for the PD they were engaging in, honored the work teachers were already doing prior to the PD and celebrated that work as "usable" or "fit" to be used in the 21st century with just a few minor adjustments here and there. This reinforced the teaching faculty at Parnell as "capable," "current and up to date," and "doing their job" as educators. All of these characteristics added to teachers' perceptions of owning the work they were engaging in and having autonomy within the district they worked in, the classroom they taught in on a daily basis, and the education profession as a whole.

The acknowledgment was made publicly by the assistant superintendent and the university facilitators at a range of events. From small grade-level meetings to televised Board of Education meetings, teachers' work from across Parnell School District was honored, cultivating a following of teachers who, in turn, took more ownership of their learning during the PD initiative. The time that was allotted to highlight this work demonstrated to teachers that the work they were doing was of good caliber, and they were important members of the district and of the wider goal of education for the 21st century.

**Demonstrating Leadership Qualities.** Lastly, teacher ownership and autonomy were achieved after each PD phase by appointing select teachers leadership positions based on their involvement in the PD initiative. Often these teachers were the individuals who demonstrated the deepest understanding of the EEF Matrix and how to utilize it; had a good relationship with their fellow teachers and could continue to cultivate new relationships with teachers from across schools; and finally, were strong advocates for the

PD because they experienced such radical changes in their pedagogical philosophies, in turn demonstrating the deepest transformative change.

### **Support Structures: Conditions**

**Grounding and Experiential Learning.** During the early stages of introducing the PD initiative to the district, time was allotted for presentations to the teaching faculty that would provide grounding and important information based on research found on 21st century education and the field experiences of the university partners from work with other school districts attempting similar initiatives. By being provided this grounding through a series of presentations by both the university partners and the assistant superintendent, the teachers were able to receive the research in a streamlined and understandable manner directly related to their daily work. In addition, it provided an overview and landscape of where education was headed not only in the US, but in other countries across the world like Finland, China (Shanghai), Singapore, Canada, and Australia. Providing teachers with a broader perspective on education that moved beyond the boundaries of their nation gave them an opportunity to imagine possibilities, compare and contrast similarities and differences, come to conclusions, ask questions, and trouble assumptions they had about education.

These presentations were strategically given early on in the initiative to pique interest and build teachers' capacity to inquire and be curious about their profession and where it was headed. They also acted as a foundational support to the work that would ensue. Teachers would be able to remember the presentations and know *why* they were involved in the PD, know *what* sparked this movement, know *who* were the major players across the globe in similar initiatives, and understand that they were trying to figure out *how* to do it at Parnell School District.

**Making Sure to Respond, Provisions, and Crisis Management.** It is clear from the literature that the supports provided during PD are paramount to the success of any initiative or program. When PD is looked on as a "drive by" (Darling-Hammond, 2006) activity that happens once, here and there, without connection, support conditions do not matter. What does matter, however, is whether or not the participants in those PD sessions retain, learn, or apply anything after the PD is complete. It is known that "drive by" PD is ineffective.

On the other hand, continuous, recursive, and connected PD offers participants opportunities to build relationships, meaningful connections, and experiences to try things out, in short, to learn actively and actually apply what they learn. In these instances, we know that PD can be very effective. However, we also know that, in these instances, supports are required in various forms to ensure sustainability, effectiveness, and scalability. Taking this into consideration, Parnell School District Assistant Superintendent Ted Scots knew he was a major support that would make or break the PD initiative that would eventually spread across the entire district. He knew that he would be a key support in terms of logistics, promoting the initiative, gaining momentum, and seeing the project through. Knowing this, he played an active role to support the initiative through logistics, voices, and alignment.

### **Logistics**

***E-mails Go Straight to the Assistant Superintendent's Office.*** As much as possible, emails from teachers, parents, and other inquiring parties were answered/ managed by the assistant superintendent's office. This was a purposeful tactic to give an overall message of importance to the PD initiative, showing that it was a top priority for the district administration. Parents and community members that had questions or inquiries could contact the central board office for answers or be pointed in the right direction of where an answer might be obtained. This also gave a message to external parties that the district's central office had a handle on the initiative and was

knowledgeable of its progress, obstacles, needs, and goals. It also demonstrated that the central office administration was willing to stand in the front lines of the initiative because it was just *that* important.

By directly responding to e-mails from teaching faculty, central administration demonstrated that they were willing to cultivate dialogue and a relationship with their teaching faculty that might transcend the often observed disconnect between teachers and administrators. By responding to the faculty emails in a thoughtful and timely manner, administration demonstrated a willingness to close that disconnect.

***Provided Release Time and Funding When Needed.*** It was apparent that funding and release time would be needed during the PD initiative. It would not have been sustainable if the district-wide PD was scheduled on teachers' planning times, lunch times, and before/after school once it was rolled out across the entire district. This would infringe on union agreements and teachers' goodwill. Thus, it was necessary for administration to consider how they would provide the time needed in order to actively engage in the PD initiative in timely and meaningful duration throughout the year. It is also important to note here that "meaningful duration" required more than 30 minutes and needed to be during times of the day when teachers were not pressed to be somewhere directly after the PD session. Oftentimes when short bursts of PD sessions were scheduled (45 minutes or less) and were followed by a class or other activity where the teacher would then have to go teach, the teacher participants would easily lose focus, experience anxiety that they had to be somewhere else momentarily, and, worst of all, disengage from the PD, distracted by the next activity. In this respect, the administration office took into consideration how much release time they could offer teachers across the year to help support them in their PD initiative. It was the priority of the administration to consider how teacher release time might impact student learning, and so any release time that was granted was considered carefully with students in mind.



***Voices.*** In addition to the logistical supports required for a successful PD initiative, it is necessary to offer PD participants the opportunity to voice their concerns, reflect on progress, and give suggestions for future changes. With that in mind, the facilitators, Curriculum Instructional Leaders (CILs), and administrators visited teachers' classrooms on a regular basis. Acknowledging the potential anxiety this may cause teachers when unannounced, teachers were sent friendly emails to invite observers into their rooms during times they felt most suitable. They were also invited to share work with other colleagues. This could happen during a classroom drop-in, through a brief e-mail, during a faculty meeting where an individual might stand up and share his/her experiences/reflections, or over a phone call to a key member of the PD initiative. Providing a variety of avenues through which teachers could share their voices alleviated some of the pressure from the teaching faculty. In addition, it charged teachers with a new-found confidence in their work when they shared their experiences with others and built trust among the PD participants.

Also, it was necessary to provide support by listening to complaints and trying to rectify them or at least answer them in a timely manner. The many voices, both positive and negative, were essential in maintaining the level of trust and confidence built throughout the PD initiative. Therefore, it was imperative that any complaints or voices of concern be immediately attended to. It was important that any areas of concern that were pervasive throughout the process be shared with the entire district to help defuse any mass confusion, and any concerns that were individual and contained were dealt with on a case-by-case basis.

***Consistency.*** Providing consistency across the parties involved in the PD process supported the PD structure as a whole. Knowing that all leading parties (facilitators, teacher leaders, and administrators) maintained the same messaging and goals when working with various teachers in various grade levels and disciplines across the district helped minimize any confusion that might have occurred if messaging changed from

person to person. It also reinforced the notion that this was a district-wide initiative and would be set in place across all levels and that no one particular party was privy to special treatment. Although this may seem harsh, it allowed for a common language to be developed and used across the district, a common understanding and way of using the EEF Matrix in planning, assessing, and reflecting on practice and, finally, in connecting the district as one aiming for the same goal. Teachers could approach any of the PD leaders and know they were getting the same message.

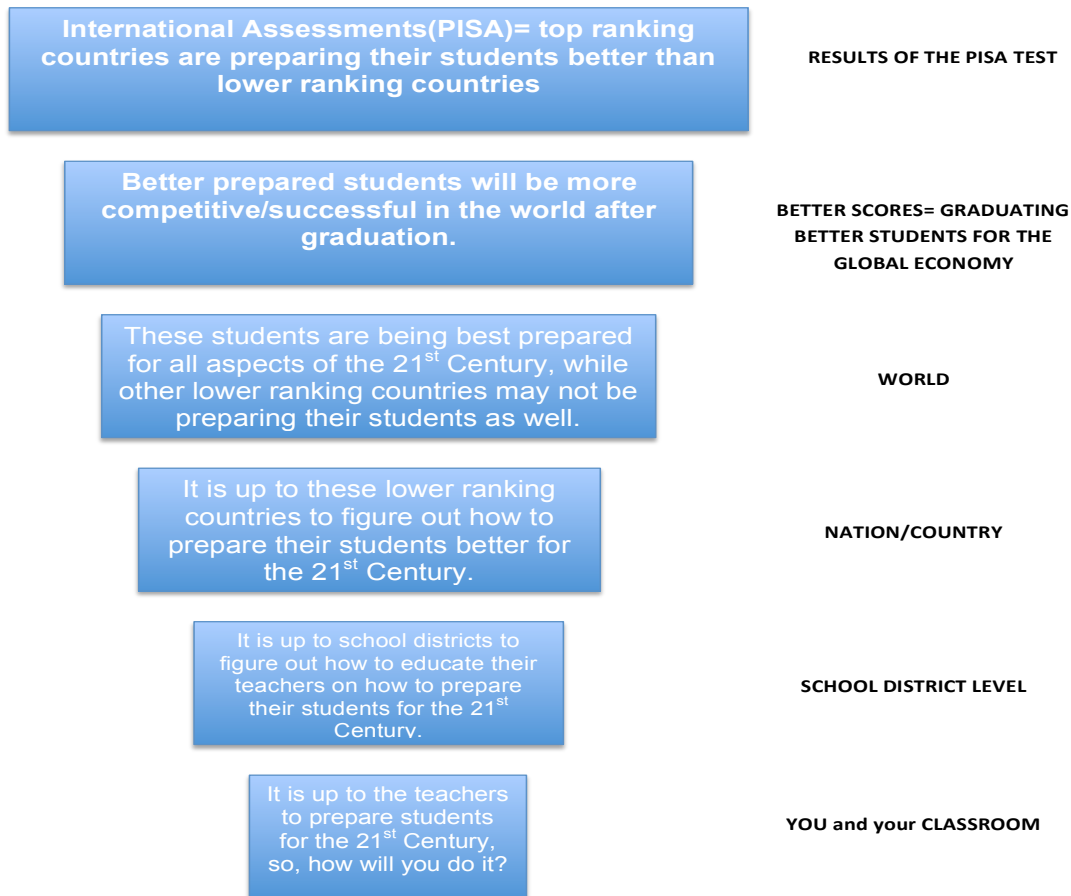
### **Applicability and Relevance of the Professional Development**

**Knowing Where You Fit In to Understand the Relevance of an Initiative.** The success of any learning situation often hinges on how relevant and important that situation is perceived to be by the participants who are learning. Contrasted previously in this section, active learning allows participants to make meaningful connections with the knowledge they encounter in new learning situations and their daily activities/routines. Active learning encourages participants to see the importance of new knowledge they gain and promotes application of that knowledge to confirm its relevance.

For teachers at Parnell School District, knowing why the district was implementing the EEF initiative was the first step to understanding how they fit into the initiative as individual participants. Teachers needed to look beyond all of the trees and picture the forest. Giving the teaching faculty a broader picture of why the district was initiating EEF provided teachers a sense of the overall goal and the climate of education across the globe. This helped teachers situate themselves within the larger picture.

One teacher, in an effort to simplify and reduce information and research for her grade-level team, created the following chart to help her colleagues determine the role of teachers in the EEF initiative at Parnell School District. Although the document was created quite informally and was meant to act as a primer, it assisted teachers in

understanding *why* the district initiated the professional development and what their roles as teachers would essentially be.



*Figure 18. Where Do You Fit in the Graphic?*

When the teachers were given context, they could become aware of the initiative goals and could see the relevance of the goals; however, the initiative goals did not become important or meaningful to the majority of the teachers.

*Awareness and Understanding Relevance:*

I get it, so we've gotta beat Shanghai, right?  
 This is great, but does that mean we're just worried about what kind of jobs our kids are going to get when they graduate?  
 I think this is definitely important. But I don't know exactly what you mean by "doing it through my instructional activities"?  
 Okay, so when do we begin? Who's going to work with us on this?  
 (Interview, Sharon Ritt, 2011)

*Attempting to Internalize and Make Meaning:*

But think we already do this here at Parnell. I mean, we're always talking to our students about the larger picture. We're always pushing them to think critically and creatively and to be original thinkers. I mean I know that I always tell my students that there is much more to the world and to themselves than just Parnell and their mom and dad. I try to push them to think. And I think all of the technology today allows them to move beyond the walls of their classroom, or their house, or community for that matter. I mean they sit on the computer all day long and can talk to people from around the world if they wanted to. (Interview, Mitchell, 2011)

Teachers demonstrated a clear difference between being aware and understanding relevance versus a demonstration of internalizing information and the impact it had on them as educators. For most teachers, at this early stage of the initiative, the goals remained abstract concepts and had not yet been adopted in a way they could change a teacher's perception of teaching and learning. Demonstrated in the quote above, a few teachers attempted to internalize and make sense of the initiative goals but did not move beyond grappling with new ideas and trying to situate their understanding in something they could relate to.

**Experientially Learning to Understand the Importance.** Parnell teachers began to demonstrate a shift from basic awareness of the initiative goals to an internalization of the goals that would, in turn, lead to a more meaningful understanding when they started to engage in the PD, specifically the six-step instructional design process. This started to occur because teachers began to see the applicability and connection to their teaching and learning philosophies; daily instructional activities; how it would promote deep and active student learning and understanding; how it impacted student perspective; and how it impacted how they worked with their colleagues and the discussions that ensued.

As teachers had an opportunity to experience the PD first hand by working experientially, their understanding and internalization of the initiative goals to "educate students for the 21st century" became deeply relevant and highly applicable. Teachers gained a sense of agency by taking a more critical/social justice stance on topics they

discussed in class. Many teachers gained an urgency to take charge of the situation and felt it their duty and responsibility to prepare the "next generation." They gave testimonials of how they changed and could never go back to their old ways of teaching now that they had internalized this new way of thinking.

It is important to note that only a majority and not all of the teachers who received the most support throughout the PD initiative, logistically, demonstrated the most agency and deepest understanding of the overall PD mission. Although the supports they received created optimum conditions for them to undergo some form of transformative change, some teachers did not respond in the same way and did not demonstrate the same levels of change. This can be attributed to the varying initial perceptions of teachers before beginning any PD work.

*Table 14. Most Support Equates to Transformative Change*

<b>Most Support= Transformative Change</b>	
1. Effectiveness of the facilitator	Introductions: was present at Introduction meeting
	Volunteer: Yes, volunteered to be part of initiative. However, initial perceptions did vary from enthusiastic to feeling pressured.
	Advocate: A majority of teachers did become advocates.
	Facilitator Quality: Was paired with the lead facilitator and therefore the most experienced
	Mediation Experiences:
2. Readiness and willingness of the participants	Self-Selection: Yes
	Presenting Work at External Functions: Was asked to present or the group they were associated with were often asked to present at meetings.
	Remedial Support from CIL's (Internal Faculty): Yes, on a consistent basis.
	Leadership Roles: Yes, they became experts that other teachers could go to for information or became designated grade team leaders.

Table 14 (continued)

3. Applicability and relevance of the professional development	Understanding and Relevance: Felt it was very applicable to their current job description and responsibility as a teacher.
4. Support provided during and after professional development	Attendance at Grounding Presentations: Yes, all were present.
	Correspondence with AS prior to start of Initiative: Yes
	Correspondence with AS during Initiative: Yes
	Correspondence with AS After Initiative: Yes
	Logistics: Most teachers felt they could alter their schedules accordingly to fit PD into their days.
	Release Time Yes, received a minimum of 2 full release days to do work
	Funding Teachers who required funding received it.
	Meeting Schedule/Frequency: Met on a weekly or bi-weekly basis
5. Balance between success and challenge provided during professional development	First Unit Planning Experience: Positive outcomes and increases in student performance.
	First Unit Implementation: Received support during implementation.
	Second Unit Planning Experience: Took on independently without a facilitator.
	Second Unit Implementation: Took on independently without a facilitator.

For those who received the least amount of support based on the five categories that impact whether or not a professional development program will be successful, there was the least amount of change or none at all.

Table 15. *No Support Equates to Little or No Change*

<b>Least Support= Little/ No Change</b>	
1. Effectiveness of the facilitator	Introductions: All were present at the introduction presentations.
	Volunteer: Yes, however, many felt pressured to volunteer.
	Advocate: No, majority of teachers chose not to advocate for the PD.
	Facilitator Quality: Only 5 of the teachers received the lead facilitator. The remaining teachers received a PD team facilitator.
	Mediation Experiences:
2. Readiness and willingness of the participants	Self-Selection: Yes, but many were reluctant and skeptical coming into the PD.
	Presenting Work at External Functions: No, teachers were not asked to present. Teachers who were asked felt immense pressure and an added task.
	Remedial Support from CIL's (Internal Faculty): Yes, but in a remedial fashion. CIL's 'checked' to see if they completed work as opposed to working with teachers to create something new and innovative.
	Leadership Roles: No, they did not take on any leadership roles during or after.
3. Applicability and relevance of the professional development	Understanding and Relevance: Yes and No. They understood the relevance of becoming more 21 <sup>st</sup> Century to change with the times, but did not know how to apply new ways to teaching.

Table 15 (continued)

4. Support provided during and after professional development	Attendance at Grounding Presentations: Yes, majority were present, 1 was absent.
	Correspondence with AS prior to start of Initiative: Only 2 teachers.
	Correspondence with AS during Initiative: Only 4 teachers.
	Correspondence with AS After Initiative: No.
	Logistics: Felt it was an added task and logistics got in the way (schedules for the most part)
	Release Time Yes, one half day. For half of the group and no for the other half.
	Funding Yes, but only 1 teacher asked for funding.
	Meeting Schedule/Frequency: Inconsistent. Bi-weekly or once a month.
5. Balance between success and challenge provided during professional development	First Unit Planning Experience: Negative, due to lack of meetings, planning was arduous and confusing.
	First Unit Implementation: Most units were minimally adapted.
	Second Unit Planning Experience: Independent and not checked on.
	Second Unit Implementation: Independent and not checked on

### Self-Efficacy

**Contemplating the Repercussions or Counting the Advantages.** For many individuals, trying something new is a time of contemplation. For some people, attempting something unknown and without much prior knowledge can be exhilarating, exciting, and intriguing. For others, it can be anxiety-ridden, a cautious time to consider possible outcomes, and an evaluation of how one might be impacted if the results turn out to be negative. These are only a few thoughts that undoubtedly run through an



individual's mind, but also a few of the variables that directly correlate to one's self-efficacy. As Bandura (1986) and Bruner (1960) posit, the conditions that surround learning directly impact whether someone learns or not.

Teachers at Parnell were not only invited to be part of a new initiative for their own individual learning, but also as teachers currently employed by Parnell School District. Knowing this, it is clear that many of teachers questioned how their decision to either be part or not part of the initiative might impact their professional goals, career, and status in the district. Teachers at Parnell Schools fell into the categories shown in the following table.

For some, no matter how the initiative was introduced and rolled out, they felt pressured and that they had "no choice" but to do what administration was putting in place. For others, they believed they had the option and could decide whether or not they wanted to participate.

Table 16. Initial Perceptions of Teachers' Self-Efficacy

Teacher Perception	Explanation/Quotation	Initial Self-Efficacy Impact
No Choice, Have to do it, will do it angrily	<i>I've been here a long time. This is just another thing they want us to do. It'll come an it'll go. If they want me to do it, I'll do it. But it doesn't mean I have to like it. It doesn't matter anyway.</i>	<p><u>Perception of Mental/Physical State</u> <u>Low Self-Efficacy</u></p> <p>This teacher's perceptions were focused on having to do something she did not want to do. She felt coerced and forced in order to maintain her occupation as a teacher in the district. She was unable to associate any success with the PD program rather demonstrating much skepticism. She also did not perceive she would receive any encouragement or praise throughout the process. She concluded this based on prior experiences in other districts.</p>
No Choice, Have to do it, will do it and it doesn't bother me all that much	<i>If Thomas Scots says do it. You do it. Yeah, but this doesn't seem that bad anyway. So if you gotta do it anyway, just do it and get on with it. That's that.</i>	<p><u>Neutral Self-Efficacy</u></p> <p>This teacher focused on engaging in the PD initiative because it was part of his job description. He was neutral and indifferent throughout explaining that there would be little impact whether he did or did not engage in the district wide PD.</p>
Have a choice, will not do it because it's another add-on, the union has my back	<i>I don't think the union is going to like us giving up our planning times and lunch times. I don't know what they're thinking. But, until they get it figured out, I have enough to do.</i>	<p><u>Perception of Mental/Physical State</u> <u>Low Self-Efficacy</u></p> <p>This teacher's mental state was focused on logistics and the auspices of a union contract agreement that would potentially be infringed upon if she decided to invite PD during her planning times or lunch times. Due to these constraints, she did not associate the PD process with achieving Success. Rather, she associated as another add on while she already had too much to do</p>
Have a choice, will not do it because I just can't right now, too busy	<i>No, don't get me wrong. I think this is great but I have PBA, the new standards, RWP, I mean I can't even get my DRA's scored in time. So I'm hoping next year?</i>	<p><u>Perception of Mental/Physical State</u> <u>Low Self-Efficacy</u></p> <p>This teacher's current mental and physical state were focused on logistics. There was not enough 'physical' time in the day for her to consider meeting with others to engage in PD. In addition, she was overwhelmed by the number of tasks she needed to complete as a new teacher in the district and could not consider adding on another task. She associated the PD process as an additional task that would be bring success to her or her practice due to the time constraints on her already busy day.</p>

Table 16 (continued)

Will definitely do it, seems interesting and I want to do something new	<i>Yeah, I mean it sounded really interesting. I mean important [laughs]. Yeah, it sounds like it would go really good with Chemistry. I mean I'm already thinking of stuff I can do with them.</i>	<p><u>Experiencing success of colleague who already did it</u>  <u>Moderate- High Self-Efficacy</u></p> <p>This teacher's subject partner (there are two teachers who teach chemistry) already experienced success in engaging in the PD and shared at a previous meeting. After hearing his experiences, she was able to consider how it might impact her daily instruction.</p>
Will definitely do it, I'm just curious	<i>I'm going to go to the next meeting and see what the 10<sup>th</sup> grade team is doing. It might give me ideas about what to do.</i>	<p><u>Associating with Success of other team members</u>  <u>Moderate-High Self-Efficacy</u></p> <p>Although 10<sup>th</sup> grade was not a grade that this teacher taught, he was curious enough to seek out other colleagues' experiences with the PD initiative. Acknowledging their successes, made him curious to experience his own possible successes.</p>
Will definitely do it, I want to succeed in this new initiative so I can move forward in the district	<i>I have something to be excited about. I'm getting my administrators license and this is exactly the kind of thing they're talking about when they ask about starting new initiatives. I definitely want to be part of this and Ted's team.</i>	<p><u>Associating with future Success and opportunities</u>  <u>High Self-Efficacy</u></p> <p>This teacher was intrinsically motivated by her own personal goals of moving from teacher to administrator in the next two years. As part of her administrators training, she was to demonstrate how she was a leader in her current practice and she noticed the beginning of this PD initiative to be a convenient demonstration of just that.</p>

**Balancing Success and Challenge.** It was necessary to deliberately scaffold learning for teachers throughout the PD process. It would have been overwhelming and unmanageable for teachers to attempt all aspects of the PD process simultaneously. Understanding this, the six-step instructional design was a key component in keeping teachers and PD facilitators not only on track, but within manageable workloads that would lead to attainable goals. By introducing new ideas in digestible amounts and challenging teachers just enough so they were engaged and thinking, but not confused and frustrated, facilitators could ensure authentic success in each session.

It was important not to make sessions too easy; if success were extremely easy to attain, this would inadvertently instill a false sense of success. A false sense of success is most troublesome when subsequent tasks become more difficult and it is more likely participants may fail on the first attempt. A false sense of success at the beginning of any learning situation does not build up a participant's stamina or sense of perseverance, and, in turn, when they are faced with a more difficult situation at a later time, they are unable to pick themselves up from a failed attempt. In contrast, authentic successes help maximize the possibility of participants making multiple attempts or taking several tries at a difficult task. Thus, it was critical to provide opportunities at the beginning of the teachers' learning scenarios that brought success to them, but in real and authentic ways, so that they engaged in the work meaningfully and were able to demonstrate resilience in later scenarios that became more difficult.

Keeping the big picture or end goal was also a big factor in balancing success and offering challenges. It was clear that the district-wide goal of "educating students for the 21st century" wasn't a goal the district was planning on achieving in a year's time, or in five years' time for that matter. By keeping the larger goal and bigger picture in mind, teachers and facilitators were always challenged with a greater task than they were presently engaged in. By starting small, setting attainable goals, engaging in manageable

workloads and incrementally challenging participants, the PD initiative maintained a balance between success and challenge.

**Negative to Positive Perceptions by Way of Success and Association.** Teachers who initially demonstrated low levels of self-efficacy and perceived the EEF initiative to be overwhelming, an add-on, temporary, or too difficult split into two categories after completing one cycle of the PD initiative. Through the experiences during the professional development activities integrated in the six-step instructional design, 76.3% of the teachers who began with low self-efficacy but still engaged in the PD because they were either neutral about being involved, or felt pressured to do so, experienced some success, encouragement, and praise and were able to associate themselves with a group of teachers who were deemed to be successful participants of the PD and advocates for the PD initiative. At the end of the first PD cycle, 76.3% of those teachers demonstrated more positive displays of motivation and confidence, resulting in higher self-efficacy.

It is important to note here that the grade-level groups who met regularly with the least number of weeks missed between meetings engaged deeper and had higher levels of ownership and self-efficacy in the EEF initiative philosophy/activities. Those grade-level groups who did not meet regularly on a weekly basis or had several interruptions throughout the year had lower levels of ownership and self-efficacy in the EEF initiative and demonstrated a partial engagement in the philosophy of the EEF initiative.

### **Three Groups of Change: DTC, HAH, Neutral**

The six-step instructional process, the unit, in particular inspired teachers to try different instructional approaches; seek out different colleagues' opinions and experiences; seek out new ways of thinking by engaging the university partners or other administrators they may not have engaged in dialogue with previously; look at their years worth of curriculum with a different set of eyes, goals, hopes, and expectations; and

finally, take time to consider their role in this initiative, in education as a whole, and in preparing the next generation of students to be successful in the 21st century.

After learning experientially through the six-step instructional design process, teachers brought different perceptions, attitudes, and understandings to discussions on what it means to be educated for the 21st century. Teachers attempted to define the capacities from the EEF Matrix, not only for their subject areas and grade levels but for themselves as individuals. Teachers fell into two distinct groups. The first group of educators expressed changes they saw in their teaching and the way they looked at education. I will refer to this group as the "deep transformative change" group.

This group is named the "Deep Transformative Change Group" based on myriad literature that discusses transformative experiences, deep understanding, and meaningful change. Pugh et al. (2009) define "transformative experience" as “(1) motivated use; (2) expansion of perception; and (3) experiential value” (p. 3). They posit that a transformative experience involves a transfer and application of knowledge to contexts both in and out of school settings while seeing and understanding the world and the objects/concepts within it in different or new ways. A transformative experience also allows an individual to see the immediate use and application of their new knowledge or skills. This definition implies that change, learning, and application all must occur in order for a transformative experience to occur. In relation to Parnell School District, it was clear that when change occurred in teachers, it could be drastic or subtle depending on the individual. The change occurred in teachers’ perceptions.

- Perceptions of the Overall Initiative
  - How teachers perceived the goals of the EEF initiative and their roles within the PD initiative
- Perceptions of the EEF Matrix Tool
  - How teachers perceived the research, discussions, and definitions of capacities in the EEF Matrix

- Perceptions of themselves as teachers
  - How teachers perceived their practice, and how they engaged with their colleagues
- Perceptions of themselves through reflective practice
  - How teachers reflected on their current knowledge, beliefs, and assumptions

Thus, it was appropriate to call the first group the "Deep Transformative Change Group" to capture the fullest possible range of what occurred to many of the teachers at Parnell. Meanwhile, the second group of teachers could not look past obstacles/ logistical hurdles that impeded their path to experience change in their teaching or ways of thinking. I will refer to this group as the "Hurdle after Hurdle" group.

Originally, I thought there was a third group--a group of educators who were neutral, not professing any positive impacts or changes nor sharing any difficulties they encountered along the way. Creating a third group for these teachers would have allowed them to remain neutrally unchanged either way. However, after further consideration, it was apparent that these teachers actually belonged to the "Hurdle after Hurdle" group because, like the HAH group, where logistical obstacles impeded them from experiencing deep change, these teachers were impeded by their lack of making deeper connections and inability or partial unwillingness to consider alternate possibilities to teaching and learning. This can be directly related to levels of self-efficacy and the conditions attributed to different learning theories.

I offer a cross-examination of interviews and documents to demonstrate teachers' perceptions in the four categories listed above. It was necessary to look at both what teachers said and what teachers actually did to provide examples of changes in perceptions. It was also important to take into consideration instances when *what teachers said* and *what teachers did* during activities did not correlate. If teachers spoke of change within their practice but did not demonstrate it by giving examples through their work, they were placed in a separate category for further investigation. This next

section, however, will not go in depth to explain those cases where *what teachers said* and *what they did* do not correlate.

**Hurdle After Hurdle Group.** As we have come to learn from Maslow's Basic Hierarchy of Needs (1943), when an individual's basic needs are unmet, trying to accomplish something other than fulfilling those needs in most cases is very difficult, if not next to impossible. Educators and scholars in the fields of child/adolescent education and adult education have similar understandings of how people learn and can share characteristics of learning that occur in children and adults. Scholars in child and adult education acknowledge that the conditions and context that surround learning experiences directly impact an individual's ability to learn. Just as Lareau (2011), the author of *Unequal Childhoods* argues, if a child did not sleep the previous night, or has not eaten in days, learning in school is extremely difficult and the last thing on that child's mind as he sits in class and listens to his teacher speak (Lareau, 2011). In contrast, that child is most likely fighting his bodily urges to fall asleep from exhaustion and/or wondering when and where his next meal might take place.

Similarly, for individuals learning new concepts and being asked to change aspects of their current practice, conditions and context directly impact how and what an individual can/will learn. We can probably assume that when conditions are optimum, the most learning would occur, while on the other hand, when conditions are subpar, little learning occurs. However, there are outliers and exceptions to every case.

The "Hurdle After Hurdle" (HAH) group at Parnell Schools demonstrated many expected patterns that a group of individuals experiencing PD with what they perceived to be subpar conditions would have shown.

There were 40 teachers who joined the PD initiative in the first round. Although all 40 teachers self-selected to be part of the initiative, different variables influenced teachers' decisions to self-select into the initiative. For instance, 30 of the teachers self-selected on their own merit and curiosity, while 6 teachers were nominated by their



colleagues to represent their grade level teams, and the remaining 4 teachers joined reluctantly. Acknowledging this, it is interesting to see the changes in perceptions and attitudes in the volunteer teachers at the beginning, during, and after the initial phase of PD was complete.

It is important to note that teachers were only categorized into the HAH and DTC groups after a full cycle of the PD finished from beginning to end. Using complete data and providing my analysis after a complete cycle eliminated the possibility of teachers' perceptions changing after I analyzed my findings, which would have required me to adjust my initial findings and analysis.

### **Perceptions of the EEF Initiative**

**Logistics that Impede Changes in Thinking.** Many teachers who began the PD with skeptical perceptions of the initiative goals and remained "unchanged" by the end of the first PD cycle and shared consistent perceptions after the first round of PD was complete. In a few cases, teachers who began the PD with positive perceptions of the initiative goals, but remained "unchanged" (see Table 13), shared similar perceptions to those teachers who began the initiative with scepticism. In the end, it was clear that perceptions were directly impacted by logistical obstacles experienced by teachers during the PD either unexpectedly, or expectedly because teachers pre-determined prior to the start of the initiative that they would not be willing to adapt their daily routines for the PD initiative (based on union rights or from being overwhelmed with too much work), resulting in a group of teachers resisting logistical obstacles and in turn never reaching the conditions necessary for learning.

For some school districts and the teachers employed within them, external pressures are often the most onerous and taxing factors that impact teachers' decisions to become involved in "extra" or "additional" work beyond their daily duties as classroom

teachers. Often schools experiencing declines in student achievement on state-wide standardized tests or schools struggling to meet state-wide requirements by way of teacher evaluations, administrator evaluations, school climate evaluations, are least interested in and have negative perceptions toward additional or extra work that is not directly related to any of the external factors listed above. This returns us to the hierarchy of needs argument in terms of teachers focusing on the crisis at hand (external accountability pressures), therefore being unable to focus on anything other than their immediate situation.

In contrast, Parnell School District's teachers did not experience the same magnitude of pressure from the external factors of accountability on their school district. Although during the time of the PD initiative, Parnell Schools was under state-wide evaluation (NEASC) at the secondary level and engaged in state standardized tests across K-12, as well as internal teacher evaluations, these external factors did not make as much impact on teachers' perceptions of what was causing them the most pressure. Instead, internal pressures that directly correlated to teacher accountability to their colleagues, administrators, and curriculum instructional leaders happened to be the most taxing factors of stress to the Parnell teachers.

In an attempt to explain this phenomenon, as a participant researcher who was in schools across the district on a weekly basis, I suggest this might have been the case because Parnell's assistant superintendent, Ted Scots, had infused a sense of "thumbing his nose at the establishment" throughout the district. It was clear that Scots considered standardized test scores and state-wide school evaluations as inadequate measures of student/teacher achievement and not particularly useful measures of students'/teachers' abilities to apply knowledge in meaningful ways or inaccurate pictures of how students would be impacted beyond secondary school. He professed again and again to his district that they were doing fine on the state standardized tests/state-wide school evaluations. He emphasized that he was sure they would be fine every year as long as everyone kept

doing what they were already doing. He also mentioned on occasion to his faculty that a dream of his was to replace the standardized tests given at the state level with alternate assessments, emphasizing that state standardized tests fell short of what Parnell Schools students were really capable of achieving. Scots's unfazed attitude toward one of the biggest external pressures on school districts impacted his faculty in ways that they too felt unfazed by the pressures of state standardized tests and state school evaluations. In addition, Scots often informally remarked to teachers that they shouldn't be worried about the state teacher evaluations, but rather the in-house evaluations created and completed by administrators within the district. He emphasized that the in-house evaluations were the ones to be scared of. In this respect, teachers internalized these unspoken policies and in turn demonstrated perceptions of pressure and stress from sets of impacting factors, both externally and internally, specific to Parnell School District.

#### **Time: Not Enough of It and Correlating Teacher Absence to Student**

**Learning.** Having enough time to complete all the tasks a practitioner must complete in a day, week, month, semester, or year is a common dilemma for many teachers. The obstacle of having too much to do and too little time to do it in often manifests in various ways: a sense of being overwhelmed, anxiety, and stress in teachers. Teachers are faced with both external and internal pressures that directly affect their perception of new ideas, work, or initiatives that are implemented during strenuous times. And, in turn, their perceptions directly impact how teachers learn, react/act, implement, understand, set goals, and ultimately, how they decide whether to be part of a new initiative or not, both physically and mentally.

Certain pressures in relation to time were implemented by the curriculum instructional leaders:

- Complete assigned curriculum within the year and according to the suggested pacing guides.

- Complete assigned units within the assigned times so end-of-semester evaluations can be completed by CILs with the proper amount of teacher observations completed.
- Complete students' evaluations for report cards in a timely fashion and be prepared for student/teacher conferences with ample amounts of student data to support them.

These three pressures from CILs across Parnell directly related to teacher presence in the classroom. In order for these three criteria to be met, teachers needed to be present in their classrooms so they could be observed teaching during certain times each semester; to collect formative and summative data by way of anecdotal notes, student observations, and mini-conferences; and to work with grade-level colleagues in planning units before, during, and after implementation. Many teachers responded with a comment similar to this: “It’s difficult to be pulled out of our classrooms all the time.”

Although replacing classroom teachers with substitutes is a regularly occurring phenomenon across education systems and substitute teachers are readily available, classroom teachers at Parnell shared their pressures of accountability and responsibility in being in the classroom as much as possible. At times, this pressure of accountability and responsibility to be in the classroom was self-induced, and other times, teachers described the unspoken/implicit pressures put on them by school and district administrators. It is also important to note that at the beginning of each year, teachers were given a research article about the correlation of student achievement and teacher presence in the classroom.

Hi everyone, hope you all had a wonderful break. Here is an article that might pique your interest on student achievement. Let me know what you think.

Superintendent of schools

The main point of the article was that teachers’ absences that amounted to more than seven times a year negatively impacted student achievement. Although this article was

not mandatory for teachers to read, teachers shared their thoughts and discussed the articles in informal settings across the district (water cooler, lunch) as a focus of discussion for a couple of weeks immediately after the article was distributed. There was no follow-up on the article, but there was definitely an impact on how teachers felt about leaving their classrooms and their accountability/responsibility as "good" teachers.

I don't think I can afford to be out of my classroom again. You know it's hard. I mean I can get a substitute, but it's never the same, you know? And geez did you read that article? Exactly, that's what I mean. Trust me.  
(Interview, Melissa Coleman, 2011)

Also, along the lines of inadequate time, teachers were not only concerned about being pulled out of the classroom; they demonstrated anxiety around the time it would take to teach additional concepts or concepts that were more complex than the content they were already teaching. Considering the three pressures discussed above inflicted on teachers by their curriculum instructional leaders, teachers shared the tight and packed timelines they were already working with. They were unable to fathom opening up their calendars any further and could not visualize a physical way in which they could lengthen days/lessons in order to analyze and teach new concepts that would require additional time. Several teachers responded, "I don't have enough time. It'll take so much time to teach these concepts to them."

This was a misinterpretation on teachers' part. Many of the teachers who shared their concerns around this time issue drew conclusions about what it would take or what they would have to do if they were part of the PD initiative. Prior to knowing the time commitments needed and the resources/skills teachers would have to draw upon, teachers made pre-conceived conclusions about the PD based on their prior experiences with other PD processes. Teachers assumed they would need more time to teach these new concepts. Whether they actually needed more time or less time would have been discussed throughout the PD sessions and determined based on teachers'/students' needs. However, what can be concluded is that teachers would definitely have to have volunteered "more"

time along the lines of giving up a lunch period or planning time/extra school. In turn, based on my observations and interviews, teachers may not have wanted to give up that time, and instead of directly stating that, they discussed the time it would take to teach to deflect any judgments that may be laid on them as teachers who were unwilling to give up some time.

### **Students' Abilities: Preconceived Perceptions of What Students Could Do.**

Teachers also demonstrated pre-conceived judgements of their students' abilities. Oftentimes teachers skirted around their students' abilities by focusing on the lack of time, but in the end, teachers were directly addressing their own perceptions of their students' abilities. As educators are charged to know "where" their students are, both developmentally and in understanding knowledge, it would be understandable for a teacher to say, "Alex can't do that yet" or "Deb can definitely do that" or "Sean should definitely try that, I think he'd enjoy it," to provide a baseline of where she/he has assessed each student to be. However, in addition to providing these remarks, teachers at Parnell discussed where their students were developmentally and in understanding knowledge, adding their perceptions of whether or not they thought their students could accomplish the suggested tasks discussed in the PD sessions. Rather than considering the tasks and differentiating the tasks for each of their students, teachers were quick to resist the suggested activities and proclaim they could not be done because they needed to focus on other work instead. Instead of considering how they could marry the work together, they turned it away entirely.

It's great, but I am struggling with students who won't write or read--I need to focus on the basics. I'm learning a lot, but I'm not sure how to transfer it to my kids who are struggling with the basics. It's too much for my general ed students, maybe for my AP and honors kids. (Interview, Christina Cyprus, 2011)

However, it is clear that an additional factor that impacted teachers' decisions to reject implementing any new instructional ideas into their classrooms was directly caused by

teachers' lack of knowledge how to do so. One commented, "I'd like to have model lessons so I can see how these capacities can be taught." Teachers stated they could if they knew how, but they didn't know how, so they wouldn't/couldn't. All of these factors shaped teachers' perceptions of what their students' abilities were and resulted in resistance to something new.

**Abstract vs. Concrete: What Does It Look Like?** Similar to teachers' request for assistance in knowing how to teach new concepts, it was clear that teachers experienced obstacles trying to make concrete connections and tangible examples of abstract concepts found throughout the EEF Matrix. Teachers wondered, "How do you measure things like 'tolerating ambiguity' or 'suspending judgement'?" Although the PD sessions were designed to address these queries and new areas of knowledge, teachers in the Hurdle after Hurdle group could not physically get themselves to the PD sessions provided or think how the facilitators in the PD sessions would get them to do this and, in turn, mentally could not visualize how they would learn. In turn, teachers either did not attend the PD sessions as suggested; attended sessions only at the beginning and at the end, experiencing a disconnect in understanding; or attended all of the PD sessions but could not make any meaningful/personal connections and thus completed the PD sessions with increased frustration and unchanged knowledge.

### **Perceptions of the EEF Matrix Tool**

**A Literal Understanding.** Teachers in the Hurdle after Hurdle group perceived the EEF Matrix to be an unhelpful and redundant tool for teaching and learning. Teachers considered it to be redundant, as the teachers in this group considered themselves to already be engaged in all of the capacities embedded in the matrix. During interviews, these teachers were asked to provide their thinking around some of the capacity definitions found in the EEF Matrix. When explaining their thinking and how they made

sense of the capacities, teachers in this group demonstrated literal understandings, misconceptions, and incorrect interpretations of terms. It is important to note that teachers demonstrated this all times, before, during, and after the professional development.

In contrast, some teachers remained unchanged because they perceived their practice was already achieving the goals of the PD initiative and did not need any further adaptation. These teachers had positive perceptions and attitudes about the PD but removed themselves from the collective group as individuals who did not need the PD because they already knew what they needed to know.

It's already stuff we've been doing all along, just being formalized now.  
English already naturally lends itself to the EEF matrix (Interview, Dolores Frin, 2011)

We do all of the things here in critical thinking. And they have to be creative when they are writing their essays (Interview, Pamela Grut, 2011)

In these instances, documents did not correlate with what teachers perceived to be doing. When lesson plans were analyzed, literal interpretations of a few capacities from the matrix were present. There were no documents that provided evidence of capacities on the EEF Matrix at a deep level of understanding. There was no connection between this group of teachers' interview answers that proclaimed they were "already doing the work" and the documents to demonstrate what they were saying was true or accurately being done. In addition, classroom observations did not elicit the EEF Matrix Capacities at the level of intensity the PD session instructional activities suggest teachers to engage their students in. We can conclude that in actuality, although teachers perceived themselves to "already be doing the work," they were not.

How can we re-analyze or critique Lord of the Flies? It's been critiqued a million times and do you really think our students are going to come up with a new critique? That's a PHD in itself (Interview, Peter Tin, 2011)

After further investigation of this occurrence, it was clear that teachers who had offered inaccurate interpretations and misunderstandings of some of the student outcome



indicators had not engaged with other colleagues about their thinking, the processes that led them to make certain conclusions, and self-directed research that supported their definitions. Rather, they made interpretations on their own and did not collaborate/share their ideas/thoughts to consider alternate possibilities and explanations. What happened was that teachers who worked individually had unintentionally separated themselves from the collective group's understandings and meaning making processes of the EEF Matrix and singled themselves out as individuals who did not know the common language that was evolving or had been created. As a result, these teachers were "othered" from the rest of the PD participants who were experiencing change during PD sessions, share-out sessions, community outreach meetings, and information sessions for recruitment. Teachers either removed themselves because they didn't think they needed to be at any of the above-mentioned events as they assumed they could already predict what the meeting was about and therefore did not need to be there, or they didn't have time to attend any meetings that were not considered mandatory.

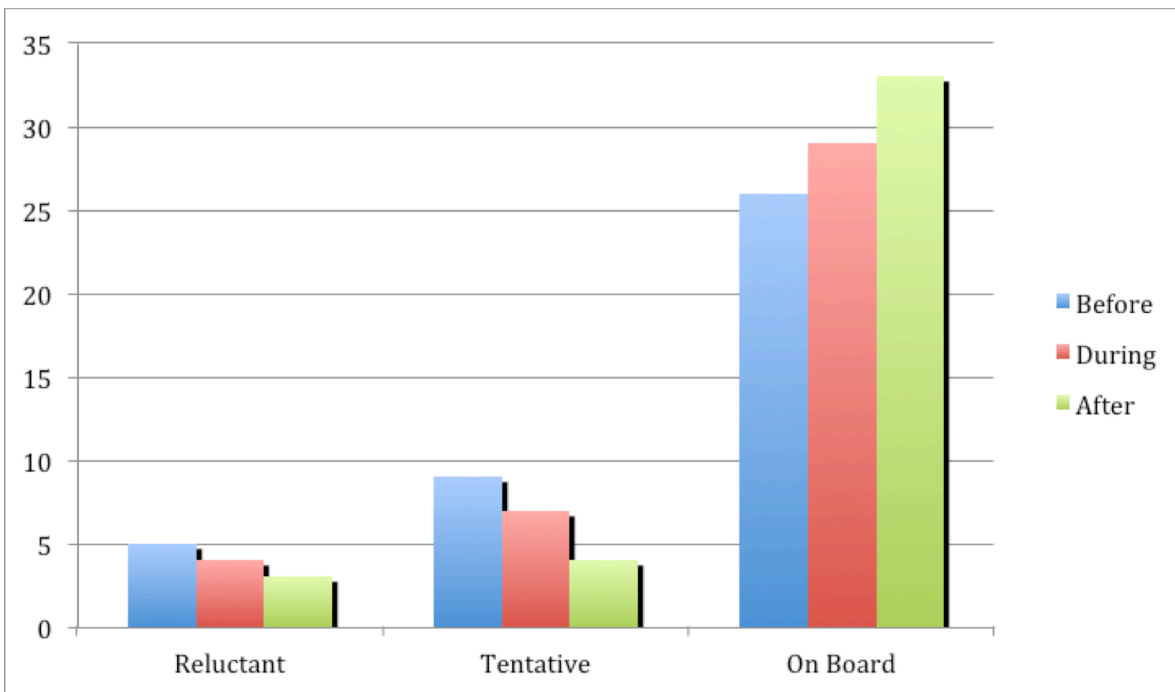
Teachers were also 'othered', at times unintentionally, and sometimes intentionally but subtly by the collective group, by not being picked to be a teacher testimonial participant at meetings; by not being picked to be part of group discussions during informal settings; by not being included or called on for observations looking for best practices. By not being chosen, these teachers were excluded from the collective group.

**What Didn't Occur: Perceptions of Practice During the Aha Moments.** The Hurdle after Hurdle group of teachers' perceptions remained unchanged because those teachers were unable to look beyond and visualize the experiences beyond the logistical obstacles of the PD initiative. Teachers were unable to get to a point where change would've been sparked by a meaningful connection, an authentic example, or an inspiring discussion with a colleague. The lack of change inhibited teachers from seeing the nuanced details and differences in their current practice and how the EEF matrix could slightly adapt their instruction to become more 21st century.

Teachers in the Hurdle after Hurdle group did not reflect on their practice in ways of eliciting any new information or reflections that led to new perceptions. This then directly impacted whether or not they would reflect on themselves as educators and the assumptions that make them who they are. Since there was no reflection on practice, there was no need for teachers in this category to reflect on themselves and their assumptions.

### Perceptions of the EEF Initiative

In the deep transformative change group, teachers' attitudes ranged from skeptical to excited to be part of the PD at the start of the initiative. Skeptical teachers perceived the PD initiative to be "just another initiative" or "another add-on," while excited teachers perceived the PD initiative as an innovative and important call to duty as educators in the 21st century. Teachers' attitudes and perceptions of the PD initiative differed in all stages of the PD process.



*Figure 19. Teachers' Perceptions of Joining PD: Before, During, and After*

As the various reasons why teachers joined the EEF initiative were discussed earlier in this section, a survey was also administered to teachers before, during, and after the EEF PD was in progress to garner any changes in teacher perceptions. The following four questions were asked on a yes, no, maybe scale:

- (1) I am volunteering to be part of the EEF Initiative because I want to.
- (2) I am volunteering to be part of the EEF Initiative as a grade-level representative.
- (3) I am volunteering to be part of the EEF Initiative because I feel I have to.
- (4) I am volunteering to be part of the EEF Initiative because I am curious.

I was not surprised to see more than half of the 40 teachers who volunteered at the start of the first phase answer yes to question (1) based on discussions of teacher recruitment with administrators at the start of the initiative. The high motivation and teacher autonomy throughout the district was apparent when a majority of the volunteers self-selected because they wanted to. It was interesting to see a high number of teachers who were curious about the initiative. This group were engaged by the end of the PD. Lastly, the teachers who were reluctant remained in the reluctant category with the exception of two teachers who moved to the "on board" category. This might imply that once logistics were no longer an issue for teachers or when they were able to look past logistical issues, they were open to new ideas and adapting their perceptions of how education for the 21st century was different. It also confirmed that when motivation and teacher autonomy are high, transformation and change might occur more easily. It brings attention to the critical support required to implement new concepts and changes across a district. Lastly it sheds light on the need for more research in districts where support is minimal and teacher motivation and autonomy are at low levels to examine what other factors impact teachers to willingly participate in new initiatives.

At the end of the first PD phase, teachers demonstrated consistent and similar perceptions of the experiences they were just part of. Many teachers became advocates for the initiative and charged themselves to recruit teachers who had not yet engaged in the PD to re-evaluate their teaching philosophies and how they were educating children for the 21st century. These teachers often took a "prophetic" approach to "spreading the word" to their colleagues. One teacher responded, "If I ever needed any more conviction about our project." They were adamant in faculty meetings and larger community meetings that they had been changed and their teaching practices transformed. One teacher exclaimed, "I will never go back to teaching the way I used to teach ever again." This teacher had implemented a pre- and post-assessment at the beginning and end of her Chemistry unit, and the results baffled her. The results showed four students who usually scored in the top half of the class score in the bottom half of the class, while three students who usually scored in the bottom half of the class who required remedial support scored among the highest in the class. Teresa interpreted the results as telling her that the EEF matrix capacities challenged students in ways that the content knowledge could not. Teresa truly believed that the EEF Matrix was a tool that created entry points for struggling students and helped differentiate learning to reach students with different strengths and weaknesses. What was most appealing to Teresa about the results of her assessment and the EEF matrix was the possibility of teaching students who were good at "school" by fulfilling teacher expectations how to take more risks and tolerate ambiguity in a way that they could un-learn how to do well in school and think independently for themselves.

I have so many kids who are under pressure who, you know, there parents are like "you have to got to Harvard" and they're so pressured to do, to get the A. They're always asking me, how many pages do you want me to write? How do you want me to do this? Why didn't I get an A on this? You know? And I just want to say forget about all that. Just put that aside and think for yourself for a minute. What is it that you are trying to do here? How are you thinking outside of the box. Don't worry about what I'm going to say for a

minute and get creative. Be creative man, I mean how do you think Bill Gates created what he did? He didn't do it by doing what his teacher told him to do in Math class. He holed himself up in his garage and thought outside of the box. I really believe the EEF Matrix lets our kids do that. I'm so psyched about this. This is going to blow Ted's mind! (Interview, Teresa Chino, 2011)

***Attitudes: Renewed Sense of Teacher Autonomy and Excitement.*** The response from teachers during and after the PD was positive and shared the common theme of envisioning the future. I would directly attribute this to the way in which the assistant superintendent set the groundwork for the project. He was persistent in acknowledging his goal to "envision the future" for Parnell School District.

Teachers initially demonstrated an overall excitement of being on a new and important journey.

I have been talking my husband's ear off about how cool it was to hear from teachers K-12 about the work they are doing and how neat it is to feel like we are all contributing a little piece of the puzzle to help each child on their pathway toward success (Email Correspondence, Jewels thom, 2011).

They shared the opportunities that were changing their teaching and learning practices while engaged in the PD. For example, teachers were grateful and excited to have enough time to be collaborating with colleagues and opening up discussion that may not have been explicitly present before. Teachers demonstrated how they were trying to find a common ground and a shared goal in their profession.

I got their feedback and then made changes to our question based on that feedback and had like 15-20 people all huddled around the same table throwing around ideas ... again, goosebumps ... it's official, I'm an AIM addict! (Phone Conversation, Helena Theo, 2011)

After the first Professional Development phase was completed, teachers reflected on how they had embarked on something transformative and how taking that initial opportunity opened up the door to be a trailblazer and be part of history.

This says to me that we have truly entered into a new era of education. It is an era that leaves far behind the old factory model and works from a new design, one based on the promotion of young minds that can produce in a world that is ever calling for continuous, inspired, and visionary creation and

enhancement. I am inspired to take on the challenge of preparing our students for a new world- a world in which their role will be to think, experiment, understand, and extend their understanding into a brighter future. The task of working together to create a unit that reflects these remarkable goals is an electrifying prospect (Email Correspondence, Walter Tyler, 2011).

One of the most remarkable attitude changes, however, occurred within a group of teachers who were initially in the "low self-efficacy" group that focused on the logistical difficulties of how the PD work would occur in Parnell. Many of these teachers' attitudes toward teaching initially focused on "covering material in the time allotted" and teaching students the "content and basic knowledge they needed in order to pass the grade." They felt pressure to have to complete the curriculum, whether their students understood it meaningfully or not, and cover the material to demonstrate they were doing their job as teachers. By the end of the professional development, most of these teachers' attitudes about "covering the material" and "getting students to pass the grade" drastically changed. Teachers transformed attitudes focused on how teachers (themselves) could confidently refuse how they have been taught or pressured to teach all these years. They wanted and eventually started to look at curriculum and why they were teachers in a different way. They stated they had to "take the time that's needed." They professed that they were no longer caught up in "I have to cover this material." Rather, this group of teachers proclaimed their new focus was about "Digging Deep and re-evaluating what is important in the curriculum and how it can be taught."

It's better to go deep and spend more time rather than gloss over. Going deeper will help students at the skills they need for the 21st century anyhow, even if they don't have as many texts to cover. Hopefully they will be motivated enough to go after those texts themselves afterwards (P.D. Discussion, Kevin Hitt, 2011).

For example, in Kevin's statistics course, his unit on expected value often finished with a written test. Kevin stated there wasn't "enough time to go into long-winded" projects. Various questions were asked on Kevin's end of unit test but usually looked like the following:

When millionaire Bruce Wayne attends a charity event he is given a free ticket for the \$50 door prize. A total of 100 tickets will be given out. Determine his expected gain if he goes to 75 such events each year. Humble newspaper reporter Clark Kent covers the same charity events that Bruce Wayne attends. However, he must purchase his own ticket for \$2. What is his expected outcome for the same 75 events?

Kevin shared that he tried to make his assessment questions fun and engaging for students so they didn't feel like the math they were doing was so boring. He explained that for most of his students, they weren't planning on going into occupations that used discrete mathematics skills but would need math credits to get into college programs that ranged from computer sciences to business. He shared that as long as students could show a senior mathematics grade on their transcript, they were covered. So, in that respect, he covered what he had to and moved on. However, after engaging in EEF PD, Kevin strongly believed that he wanted to teach his students to *actively* engage in his mathematics course, not just finish the work and move on. He wanted students to understand why statistics were used and how they could apply them to the real world. He didn't want the pressures of having to cover the curriculum stand his way any more. Kevin decided to change the format of his end-of-unit assessment for his expected value unit. Instead of giving a traditional test students could complete in one period, he decided to assign a project students would have to think carefully about and research.

Expected Value: The "real" picture

It is an accepted fact that a college degree gives you a greater "expected earning potential" over the long term. Your job is to defend or refute that premise. Here's how you'll go about it.

COLLEGE:

1. Take a realistic look at a job/business/profession you see yourself headed toward post college.
2. Find the probability of actually getting that job/business/profession
3. Find the average annual earning of that job/business/profession over a 15 year period.
4. Take a realistic look at the cost of your 4 years in the college you are pointed toward at present (count tuition/fees/room/board/books etc, you should be able to find a VERY accurate version of this either in the materials they've already sent you or online through their website)

NOT College:

1. Use the premise that you did NOT spend that money on college and you were actually able to earn money over the 4 years you did not spend there. (You may or many not count the money you would have spent as money you received also)
2. Take a realistic look at a job/business/profession you might have started in had you NOT gone to college and what that REALISTIC earning potential might have been

Summary Info:

Using the traditional expected value approach as numerical support, defend or refute the original premise that a college degree gives you a greater "expected earning potential" over the long term.

*Figure 20. HS Statistics: Expected Value Project\*

Kevin created a problem that asked students to calculate expected earning based on whether or not an individual possessed a college degree. However, he didn't supply any of the statistics students needed in order to create a possible solution to the problem. Kevin was intentionally drawing on students capacities to interpret, and search for information by not making the data available to his students. By doing this he forced students to actively engage with the problem in order to solve it. He forced students to think and cultivate questions in order to find the information they needed. He forced



students to research, explore, and make educated conclusions. He believed that the topic was engaging and meaningful and would make students apply their knowledge to the real world. He hoped that the assignment would demonstrate to students how his mathematics course could be applied once they stepped outside school.

### **Perceptions of the EEF Matrix Tool**

In addition to changing perceptions and attitudes, the teachers in the DTC group tried to make sense of all the research, discussions, and definitions of capacities in the EEF Matrix by creating organization systems that made sense to them; breaking down the language and topics into manageable pieces in order to explain them to other people in layman's terms, and by making personal connections to the capacities so that they could see the relevance and applicability of each student outcome. One teacher shared in an e-mail how he went about creating organization systems to understand the EEF Matrix.

FYI, part 2, in order to communicate this project effectively, I have begun to speak of 21<sup>st</sup> Century skills in terms of 3 "groups"/categories/"buckets":  
(1) thinking skills (i.e. critical and creative thinking, problem solving, etc.),  
(2) ICT skills (i.e. digital literacy, etc.), (3) interpersonal/intrapersonal skills (abilities to collaborate, perseverance, etc.). I do this with staff/BOE/parents/ etc. to emphasize that this project is an effort to really identify and measure student achievement towards the first of the three groups (above) of 21st century skills (Email Correspondence, Frank Cope, 2011)

By attempting to make sense of the new knowledge and discourse created through the professional development initiative, teachers demonstrated the start of change by actively learning something new. I emphasize and purposefully use the adverb "actively" to describe how the teachers in the DTC group learned new concepts to contrast with how the teachers in the Hurdle after Hurdle group learned. Although teachers ranged in how actively they learned new concepts in the DTC group, these teachers engaged in learning by making connections, whether basic or complex, to help them make meaning in an authentic way. In contrast, teachers in the Hurdle after Hurdler group (which will be

discussed in more detail in the next section) may have learned new concepts by memorizing terminology and recalling the examples provided; these teachers did not make meaningful connections that would allow them to demonstrate a deep understanding or apply their new knowledge to an authentic situation. Based on a survey we collected from teachers right after the introduction of the EEF Matrix, during EEF PD, and after the first PD phase was complete, teachers' comfort level and understanding of the EEF matrix capacities seemed to peak highest and hold steady in the "still grappling" category. Teachers were asked to rate the following statements as yes, no, or maybe.

- (1) I am unsure about most of the capacities on the EEF Matrix and do not feel comfortable using it as a planning tool.
- (2) I am unsure about some of the capacities on the EEF Matrix and would like assistance in using it as a planning tool.
- (3) I understand most of the capacities on the EE Matrix and feel comfortable utilizing it as a planning tool.
- (4) I understand each capacity on the EEF Matrix and feel comfortable utilizing it as a planning tool.

One hundred percent of teachers answered yes to question (1) after the introduction to the EEF Matrix. During the PD, more than 50% of teachers felt they were still grappling with making sense of the matrix, while the remaining half of teachers felt uncomfortable using the matrix without explicit support or guidance. By the end of the first phase, more than 60% of the teachers remained in the "still grappling" phase, indicating they were willing to learn and explore about the matrix but still required support in using it appropriately or to its fullest potential. Eight teachers felt they had a deep understanding of the EEF Matrix that would allow them to help plan their own upcoming units or help another colleague plan an upcoming unit. Those eight teachers happened to become EEF leaders

and presenters at faculty meetings who shared their experiences and insights to using the EEF matrix.

Although the survey results displayed these eight teachers as part of the "making connections" category, when I spoke with them informally after later PD sessions, they shared that they maneuvered between the categories of "still grappling" and "making connections" on a case-by-case basis. As they tried to use different capacities, they found their thinking changed and at times had to re-consider initial definitions of capacities and how they impacted their practice. They felt that as continuous life-long learners, it was their duty as critical thinkers to continuously trouble the EEF matrix and their own interpretations and thinking in order to remain current and to challenge themselves as practitioners. As one teachers stated,

Just because you think you've got all twenty of the capacities figured out, it doesn't mean you made it to the top of the mountain and now you plant your flag and say, I'm done. No way. It means, go back and see if you missed something or can I look at something differently? Or is how Alex is interpreting inspiring me to look at this capacity in a different way? Trust me, there's no ending to this. It just keeps on going (Interview, Carol Tate, 2011).

Only a few teachers felt they could make connections to all 20 of the capacities, and many teachers remained in the "new knowledge category" as they continued to unpack the keywords and language of the EEF Matrix. This might imply that the EEF matrix was not teacher-friendly, too vague, or too subjective, resulting in too many possible interpretations and discrepancies in definitions. On the other hand, it may imply that teachers could not make connections with the matrix capacities until they experienced using them in their class. Before teachers used the capacities in their daily instruction, many teachers shared that they did not feel comfortable enough to say they understood the matrix well.

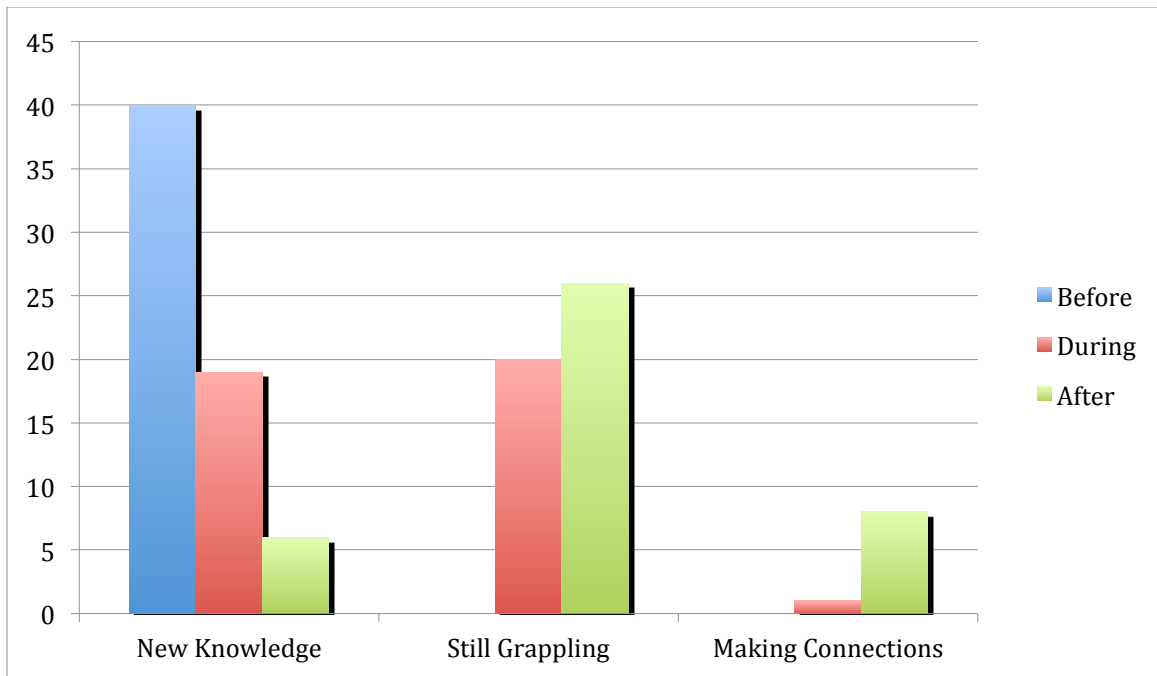


Figure 21. Teachers' Perceptions of the EEF Matrix: Before, During, and After

### Perceptions of Practice: A Surge of Social Activism and Troubling How/What Students are Taught

The DTC group demonstrated a change in the type of discourse they engaged in with colleagues during planning meetings and informal meetings (lunchtime, after school, at the water cooler) and the types of questions they asked themselves when planning, and with students when teaching in the classroom. There was a wide range in how deeply the DTC group engaged in this new discourse and how they asked questions differently when comparing teachers' experiences during and after the PD. Some teachers demonstrated some change, while others displayed characteristics that implied deep change. Based on the data, the teachers in the DTC group demonstrated a range between four possibilities of change.

**Category Three: How Teachers Applied PD Experiences and Opportunities to Their Own Teaching and Educational Philosophies**

*Figure 22. Characteristics of Change Observed During the Six-Step Instructional Design Process*

	LOW ----- HIGH			
	Basic/Superficial	Emerging/ Probing and Searching	Present/ Thoughtful and Supported	Intense/ Complex and Determined
<b>Characteristics of Change Demonstrated Throughout the Six-step Instructional Design Process</b>	<ul style="list-style-type: none"> <li>- repeats what was discussed during PD</li> <li>- replicates PD activities without adaptations</li> <li>- Reflections do not acknowledge growth or change/ patterns or irregularities in findings after engaging in activities</li> </ul>	<ul style="list-style-type: none"> <li>- questions what was discussed during PD and attempts to seek out alternate examples to support their questions/ findings</li> <li>- attempts to adapt existing lessons with some difficulty</li> <li>- Motivation and persistence is evident but temporary in some cases</li> </ul>	<ul style="list-style-type: none"> <li>- Transfers what is learned in PD to practice</li> <li>- begins to collaborate more with colleagues</li> <li>- attempts to gather authentic examples of EEF application for reference</li> <li>- takes on EEF leadership roles</li> </ul>	<ul style="list-style-type: none"> <li>- provides new and original ideas to consider</li> <li>- driven to explore further</li> <li>- provides testimonials of self-change to colleagues</li> <li>- convinced that curriculum MUST change</li> </ul>

**Basic/Superficial Change**

Teachers who displayed a simple and/or literal understanding of the topics discussed in EEF PD sessions demonstrated basic/superficial change. This initial level of change utilized the EEF Matrix methodically and quite literally. They were aware of the six-step instructional design and made sure to complete each step according to the timelines the PD facilitators suggested and replicated many of the examples provided

during the PD sessions in their own classrooms. Fulfilling each of the six steps was one of the top goals of facilitators. They hoped teachers would follow the six steps every time they went to plan or adapt a unit. Teachers who were part of the basic/superficial group imitated exactly what the facilitators modeled in PD sessions. This group of teachers' bulk of change occurred in the beginning of the PD when they were learning *how* and *what* to do. They had an extreme learning curve at the start and plateaued once they implemented their adapted lessons and during reflections at the end of the six-step instructional design. This group of teachers changed by way of (1) learning something new and (2) replicating what they learned in turnkey style in their classrooms.

For example, in Robert's 11th grade American Studies class, they just finished reading Mark Twain's *Huckleberry Finn*. After attending three EEF professional development meetings, Robert was certain he could implement the six-step instructional design without any additional assistance interpreting the EEF matrix. He chose to re-create his existing Satire Post-Test for *Huckleberry Finn*. As he was instructed, he chose a capacity from the EEF Matrix he wanted to focus on and measure. He chose "projecting" a capacity from the communication category. The projecting capacity read,

Students will be able to choose the most effective medium for the message, use knowledge and information interactively to share important information with purpose to impact readers/listeners/receivers.

He embedded "projecting" into his post-assessment by asking students to accumulate a list of behaviors and attitudes found throughout *Huckleberry Finn*, then choose one behavior/attitude and address it in the form of a letter to a particular audience in the genre of satire.

### ***The Adventures of Huckleberry Finn: Satire Post-Test***

Our reading of Mark Twain's novel *The Adventures of Huckleberry Finn* has given us a chance to see how a satirist wages verbal warfare at humanity's weaknesses, faults and flaws. Our lessons in this unit have illustrated the components of satire (irony, exaggeration, understatement, reductio ad absurdum, etc.), introduced other examples that are utilizing satire (Stephen

Colbert's *Esquire* article, Kurt Vonnegut's "Harrison Bergeron," the Jon Stewart sketch), and you've spent time in group and individually locating and defending examples of satire in Twain's novel itself. Now it's time for you to create your OWN satire and put it to work in way that really matters—by sending your satire out into the world....

In class we generated a list of what you feel are humanity's weaknesses, faults and flaws. We all complain about these behaviors and attitudes but that rarely does much good. Now you'll get the chance to play the satirist—to create some written or visual piece that will not only raise your audience's awareness of their bad behavior, it might even effect a change. Here's how you'll go about it:

- (a) Look over the list of behaviors / attitudes you took down in your notes.
- (b) Select ONE that provokes the strongest personal reaction from you. Think through how you might go about addressing your concerns in a satirical way.
- (c) Then proceed by deciding the following: The target(s) of your satire... The precise behaviors / attitudes your satire will address... The ways in which you will put that satire across (e.g.—use of irony, exaggeration, bathos, etc.) How strongly worded you want your satire to be—sharp, biting and vitriolic or humorous and gently mocking.

Robert shared that he knew he was asking students to "project" because he explicitly asked them to target a particular audience. By asking students to address their letters to either a friend, a neighbour, or a politician, Robert perceived that his students fulfilled the capacity of projecting. However, during my analysis, what was evident was that Robert superficially interpreted the projecting capacity by asking students to fulfill the very basic requirements of the outcome. He had overlooked the meaning of the capacity to target particular groups or individuals with important information, through various and explicitly chosen mediums, to impact humanity with new knowledge gained. He figured that addressing a satirical letter to a friend was enough in targeting a specific audience. Robert gained basic understanding of a capacity in a PD session and tried it out the next day without further discussion or reflection with a PD facilitator.

Although "projecting" was not a capacity that was used as example in the EEF PD sessions Robert attended, he replicated the steps of fulfilling the six-step instructional design and adapting an assessment that was modeled in the EEF PD sessions. In turnkey fashion, Robert attempted to utilize the EEF Matrix but did not interpret the capacity of

"projecting" deeply enough to challenge students or change his instruction in a way that would have pushed students to think more critically.

It was also Robert's teacher evaluation year. Based on the teacher evaluation conducted by his curriculum instructional leader, Robert was given a "satisfactory" on the EEF matrix section. His CIL wrote that Robert needed more professional development and opportunities to work with the EEF matrix and suggested that Robert pair up with another colleague in the English Department for his upcoming unit.

### **Emerging/ Probing and Searching Change**

Teachers in this category displayed characteristics of curiosity and inquiry. This group of teachers left PD sessions with unanswered questions they hoped to find answers to and investigated ideas that seemed interesting or relevant to the discussions that occurred during the PD activities throughout the year. These teachers interpreted the EEF Matrix in similar ways to those in the Basic/Superficial category, but moved beyond reading the capacity descriptors/student outcomes literally by probing the keywords in each outcome and attempting to find a concrete example they might in turn be able to replicate in their classrooms. They attempted to find these answers by talking further with the facilitator and colleagues and reading recommended texts or texts they found on their own both online and in print. This group of teachers' change occurred most at the beginning of the PD and in various points across the six-step instructional design.

However, at many of these points of change, this group of teachers did not necessarily find definitive answers (either because they eventually gave up or they were unable to find answers and continued to search) and remained in a state of questioning. In turn, they remained on the brink of change. The state of probing and searching stopped these teachers from experiencing further change beyond their initial learning curve of new knowledge gained. This group of teachers changed by way of (1) learning something



new, (2) slightly adapting what they learned to apply in their classrooms by asking more clarifying questions, and (3) beginning to reflect on their state of inquiry but not yet able to use concrete examples to make meaningful connections to their daily practice and current thinking.

For example, in an 11th grade American Studies class, Jessica shared that teaching in a mainly White high school in an affluent neighbourhood, she often heard students comment "unknowingly"<sup>1</sup> during her immigration unit. Students shared that "Illegal immigrants steal jobs and should be deported back to their countries," "Mexicans come to America thinking it's a better life here but their lives are fine in Mexico, they just want to be American," and "My gardener is Mexican and he's really hard working. My dad says he's the best gardener he's had because he isn't an America citizen and wants to keep his job here." Jessica reflected that she felt "a deep hole in [her] stomach" when she heard her students speak this way, and she needed to figure out ways her students could see issues from other viewpoints.

Through our discussions in the EEF PD sessions, we created an assessment question for students that would measure students' abilities to engage in multiple perspectives before and after explicit instruction on taking different viewpoints. Based on the EEF Matrix, the capacity "perspectivizing" states, "Students will be able to engage in an original empathetic response informed through examining and issues from multiple perspectives (e.g., alternate theories, possibilities, or absent sources)."

Select a tension caused by immigration, innovation or the effects of industrialization today. Write a letter to Senator Blumenthal or Senator Lieberman discussing a specific tension that you think is important in the United States in 2012.

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<sup>1</sup>Jessica used the word "unknowingly" with air quotes each time she said the word. She implied that students made inappropriate and "ignorant" comments that stemmed from conversations at the dinner table at home. However, she didn't want to label her students or their parents as "ignorant" or speaking "inappropriately," so she chose to use the word "unknowingly" for the record.

<sup>2</sup> Often the three teachers would refer to 'creating' as the 'arts and crafts'. The act of

Jessica hoped that students would be able to look at issues like immigration and innovation from economic, political, and social perspectives. When Jessica administered the question at the beginning of the unit, 45% of students scored a level 1, 45% of students scored a level 2, and 10% of students scored a level 3. No students scored a level 4 in engaging in multiple perspectives.

*Figure 23. Immigration and Innovation Pre-Test Rubric*

EEF Capacities	Limited	Emerging	Present	Complex
1) <b>Critical Thinking:</b> Analyzing	Student is <b>unable</b> to explain a tension. Any underlying assumptions are <b>not explored</b> .	Student <b>attempts to</b> explain a tension. Student identifies what needs to be changed, but <b>does not provide for clear and relevant ways</b> to lessen the tension. Any underlying assumptions <b>may be somewhat explored but in a simplistic way</b> .	Student is <b>able</b> to explain a tension. Student <b>identifies</b> what needs to be changed and <b>attempts to provide for clear and relevant ways</b> to lessen the tension. Any underlying assumptions are <b>partially explored</b> .	Student is <b>fully able</b> to explain a tension. Student <b>clearly identifies</b> what needs to be changed and <b>provides for clear and relevant ways</b> to lessen the tension. Any underlying assumptions are <b>fully explored</b> .
2) <b>Global:</b> Perspectivizing	Student <b>does not appear</b> to engage in an <b>empathetic response</b> .	Student <b>attempts to</b> engage in an <b>empathetic response</b> . Examines the issue from <b>one perspective</b> .	Student is <b>able</b> to engage in an <b>empathetic response</b> . Attempts to examine the issue from <b>at least two perspectives</b> .	Student is <b>fully able</b> to engage in an <b>original empathetic response</b> . informed through examining an issue from <b>multiple perspectives</b> .

The scores on her pre-test clearly showed a need for students to learn how to engage in multiple perspectives. It was not surprising to Jessica when analyzing student answers to read similar comments to those heard during class discussions on immigration. Students continued to have negative opinions and assumptions about immigrants entering the United States and perpetuated power, race, and class structures through their discussions. Jessica hoped to explicitly teach students how to engage with different viewpoints and take on multiple perspectives. She hoped to instill empathic understanding in her students and offer them opportunities to explore why immigration happens from two viewpoints: immigrants and countries open for immigration. However, Jessica was unsure how to do everything she wanted to accomplish. She was unsure how to approach conversations with students that would essentially question the types of ideologies and beliefs that were built into their identities by their parents, grandparents, and other impressionable people in a high school student's life. Jessica asked me during one PD session, "Am I supposed to tell John that his grandmother is a racist?" Jessica was uncertain how to tackle difficult issues like race, class, cultural differences, power, and White guilt. She was unsure how she might adapt her lessons further or probe students with other questions that required them to take on multiple perspectives. She got lost trying to provide students with authentic examples and platforms for difficult and tense conversations around race, class, judgment, power, and empathy.

Jessica decided to teach her unit the way she normally would have without any adaptations to lessons other than two discussions that asked students to take on the perspective of an immigrant from Mexico or Africa and try to understand why they would want to immigrate to another country. During these two discussions, Jessica attempted to challenge her students by offering cultural history and background for her students to draw conclusions from but ended up creating generalizing stereotypes about cultures that were often misinterpreted by students. For example, in one discussion, a student raised her hand and asked, "So if Mexico is so bad, why do people still live there?"

Why doesn't the U.S. help Mexicans?" This question confirmed Jessica's use of general comments that lead to students' misunderstandings of entire cultures. Jessica was often discouraged after these types of discussions and decided after the second group discussion, which she deemed unsuccessful based on students' questions raised in class, that she would go back to her usual way of teaching and table the integration of the EEF Matrix for another time. Jessica demonstrated emerging/probing/searching change in her unit planning. She gained new knowledge and implemented it into her classroom but was not able to carry it through beyond the initial introduction to students. During the course of her unit, Jessica continued to attend EEF PD sessions, talk with colleagues, and search for lesson plan examples that helped tackle the difficult issues she wanted to address. Although she didn't give up thinking about the EEF matrix and how it impacted her teaching practices, she was unable to move forward with adapting any other parts of her daily teaching activities.

At the end of Phase One, Jessica was asked to mentor another colleague from the English Department who had not been involved in the first stages of the EEF Matrix PD. She was asked to share her understandings, interpretations, and classroom examples of how she utilized the EEF Matrix in her Immigration unit. However, Jessica was not asked to help her colleague plan or assess any upcoming units. Jamie Lynne was asked specifically to share her experiences to help motivate and entice other colleagues, but planning and implementation of EEF adapted units were left for PD facilitators or the CIL to lead. It can be interpreted that asking Jessica to only attract other teachers to the EEF PD and not help them plan meant she herself had only gone so far in understanding the use of the EEF Matrix and needed further support in changing her way of thinking and teaching.

### **Present/Thoughtful and Supported Change**

Teachers in this category displayed characteristics of focused inquiry and the ability to make meaningful connections. This group analyzed the EEF Matrix descriptors/student outcomes and looked for supporting examples of each of the keywords within the capacities they chose to focus on for their unit. They looked to texts, both in print and online; engaged in discussion with colleagues and facilitators; enrolled in additional professional development seminars offered throughout the state and neighboring state; engaged administration on their thinking behind the language of the EEF Matrix; and created an archive of materials from prior and/or related experiences that colleagues could draw on that connected to the capacities found in the EEF Matrix. These teachers made it very clear, however, that the materials aggregated in the archive were merely suggested examples that provided "starting points" or "basic foundations" for teachers to work from, but were not exemplars of concrete examples of any of the capacities. They noted that the exemplars would eventually come in time as they continued their work with the EEF Matrix. They acknowledged that their new responsibility would entail searching for or creating their own high-calibre examples of the capacities in the form of lesson plans, assessments, teacher questions, etc., eventually replacing the current examples in the archive to reflect the EEF Matrix accurately. However, they attempted to create a baseline to work from by compiling key documents that carried traces of the EEF Matrix capacities within them.

This group's change occurred consistently throughout the entire PD process. Like the first two groups of teachers, there was a steep learning curve at the beginning of the PD initiative. After that spike in learning, this group of teachers consistently demonstrated characteristics of change until the end of the PD. They changed by way of (1) learning something new, (2) making authentic and meaningful connections to the EEF Matrix capacities, drawing on their prior knowledge, new knowledge (seeking out

additional information), and creating concrete examples, (3) adapting what they learned using supporting information and evidence of success from various sources, (4) reflecting and engaging in meta-analysis on their teaching, learning, and thinking processes, (5) making basic conclusions and noting the impact/implications of their decisions on their teaching, and (6) acknowledging the iterative nature required in order to succeed in this type of teaching and learning.

For example, in Eugene's 11th grade Government class, students were studying the powers and limits of the U.S. executive branch. They had to determine whether the design of the executive branch was effective in meeting the needs of citizens, and if the growing autonomy of the executive branch better met the needs of society. After attending three EEF professional development sessions, Eugene decided that he wanted to focus on two capacities. The first capacity he chose was from the collaboration category, "Engaging in Collective Intelligence:"

Students will be able to work as a group towards a complex problem that can only be solved through the collaboration and various expertise of each group member.

He also chose "engaging in global issues" from the Global Thinking category:

Students will be able to analyze ethical, economic, political, scientific & cultural issues affecting the world internationally and the transnational implications for humanity. This may lead to contributions of new ideas for advancing humanity.

From the PD sessions, we discussed how assessments could be tailored to ask students to demonstrate their learning in authentic ways. This was an important facet for Eugene to explore because his upcoming U.S. executive branch assessment was laid out so students defined the different roles of each cabinet within a class period. He shared that, for the most part, students were able to memorize the functions of each branch, but he was quite sure that they probably didn't care or remember beyond 11th grade. He knew they were only memorizing content so they could regurgitate it on a class assessment. He wanted to

create an assessment where he could engage students in a type of thinking that required application and exploring real-world issues that impacted their lives at a local and global level. With that in mind, we created a problem that read,

An emergency cabinet meeting has been called for tomorrow. The President has informed you that the state of New York has requested emergency aid in the anticipation of the disaster from Hurricane Sandy. Hurricane-force winds are expected along portions of the coast of New Jersey, New York City Area, Long Island, Connecticut, etc. The Center of Sandy is expected to make landfall along or just south of the southern New Jersey Coast within the next few hours. Hurricane-force winds extend outward up to 175 Miles/280 Km., while storm force winds extend outward up to 485 miles/780 Km. The combination of an extremely dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters. Long Island and New York Harbor will get 6-11 feet. Rainfall totals of 12 inches are possible from the southern tier of New York State Northeastward to New England. Sandy is expected to transition into frontal or wintertime low pressure system shortly with snow accumulations of 2 to 3 feet in the mountains of west Virginia and locally higher totals by Wednesday. In addition to the catastrophic damage the storm will cause to communities in the NY area, we can anticipate gasoline shortages, food shortages and power outages over the next few days. The mayor has issued an evacuation of all of lower Manhattan. As a cabinet member, the President is counting on you to form a plan of action. Please use your knowledge of your department to collaborate with your team to design a plan of action. Please bring with you a written report of your department's plan of action.

Students had to work in groups to provide possible solutions to the problem and had to share how they believed the decisions of the U.S. executive branch impacted humanity on an ethical, economic, and political level. Eugene went through his upcoming units and adapted the problems he posed to students, integrating various perspectives into his discussions to provide students with opportunities to explore multiple theories and possibilities. He had learned something in the few sessions of EEF PD, integrated it into his daily practice, and continued to adapt his practice as new units and lessons arose. Based on my observations, Eugene did not work independently and rather began to collaborate with three other teachers in the English and Humanities Departments. They worked as a team to adapt existing lessons, aggregating lessons they had adapted that

they believed were exemplars of utilizing the EEF Matrix well. They also talked about the EEF Matrix and one another's interpretations of various capacities to come to a common language and understanding of each student outcome. They grappled through discrepancies in definitions of capacities by finding literature that might support their arguments and began a 21st century book club that reviewed a book a month devoted to 21st century teaching and learning. Eugene demonstrated present/thoughtful change through the integration and internalization of new thinking across his daily practice.

By the end of the first phase, Eugene was appointed EEF Curriculum Instructional Leader and was in charge of rolling out EEF PD for various grade levels that were not taken care of by me and my PD team. His appointment as EEF leader can be interpreted as another demonstration of his present-level understanding of the EEF matrix and what it is meant to offer teachers.

### **Intense/Complex and Determined Change**

This group of teachers displayed characteristics of relentless determination, perseverance, and profound thoughtfulness. This group analyzed and troubled the descriptors/student outcomes in the EEF Matrix. They read critically and worked as a group to understand each capacity and the keywords. First, they made sense of the new discourse that was embedded throughout the EEF Matrix. Second, they made authentic and meaningful connections to each of the capacities and their own prior experiences in teaching and learning. In addition, they furthered these connections by attempting to interpret each capacity through the perspectives of different disciplines and grade levels. Third, they troubled each of the capacities and their understandings of them by interrogating their own assumptions and how those assumptions created the views and beliefs they currently carried with them. This self-reflection and upheaval of rooted ideologies, preconceived notions, and presumptions pushed teachers to re-evaluate not



only their philosophies of education but also their individual philosophies as citizens of the world.

This group's change occurred consistently from beginning to end of the PD initiative. Their change, however, continues on, even after the PD initiative is finished. This group of teachers continue to self-reflect and push themselves to keep changing by aiming to grow and learn more – searching for inspiration and innovative ideas in different countries' education systems.

This group of teachers changed by way of (1) learning something new; (2) making authentic and meaningful connections to the EEF Matrix capacities drawing on their prior knowledge, new knowledge (seeking out additional information), and creating concrete examples not only for their own grade level and discipline but also for other levels across the district to achieve alignment across elementary to secondary levels; (3) adapting what they learned using supporting information and evidence of success from various sources; (4) reflecting and engaging in meta-analysis on their teaching, learning, and thinking processes; (5) reflecting and reevaluating the assumptions that create the lens they view the world in; (6) making complex and recursive conclusions that clearly delineate the impact/implications of their decisions on their teaching, students, philosophy of education, and philosophy of global citizenship; (7) acknowledging the iterative nature required in order to succeed in this type of teaching and learning; (8) cultivating an intrinsic motivation to continue growing and learning beyond the PD initiative and beyond the walls of their community/nation, but across the world.

For example, in Jamie Lynne's 11th grade American Studies class, prior to any EEF Matrix professional development, she asked her students to answer the following question prior to beginning her unit on the civil rights movement to garner how much her students already knew.

*Pre Test Question before any Professional Development:* How has the civil rights movement impacted us today? Give an example and explanation based on our discussions in class.

She used the answers she received from this question to inform her instruction for the next few weeks during the unit. During our discussions, she shared that her plans didn't change very much from year to year. For the most part, she would have students study Rosa Parks, Martin Luther King, Jr., etc. She felt that no matter how much her students learned about the civil rights movement, the majority of her students didn't seem to empathize more or see issues in society through different perspectives at the end of her unit or class. During the third EEF PD session, we decided to craft another question she could use in her civil rights movement unit that would provide students with opportunities to explore an issue that the very state students resided in was grappling with. It was an issue that was local enough to impact students on a local community level, but a large enough issue that it impacted the nation as well. The question we created specifically drew on two capacities in the EEF Matrix. Jamie Lynne and I chose to emphasize "perspectivizing":

Students will be able to engage in an original empathetic response informed through examining and issues from multiple perspectives (e.g. alternate theories, possibilities , or absent sources).

and "interpreting: from the critical thinking category:

Students will be able to accurately interpret and demonstrate a deep understanding of the issue.

By offering students a real scenario that piqued their interest and provided information that was new to them, we hoped to capture their attention and then have them consider the various factors that played roles in the problem posed. We asked students to apply their content knowledge of the civil rights movement to an authentic scenario so they could see the transferability and the impact of the civil rights movement as more than just something they learned in class. We asked students to explore issues of racism, class, and

inequality to bring attention to hidden power structures students may not have acknowledged previously. The question read,

Connecticut has the largest achievement gap between whites and blacks in the entire nation. This is due to many factors, including but not limited to racism, language differences, differences in access to resources, and extreme differences in socio-economic status. Imagine how you might go about closing this gap. What steps would need to be taken? (Here is an opportunity for you to think outside of the box.) You might include methods or actions from the Civil Rights movement of the 1950s and 1960s.

Jamie Lynne was highly invested in the question we created and the EEF Matrix capacities she had chosen to explicitly teach in her American Studies unit. She adapted nine out of eleven already existing lessons in her civil rights unit and created three additional lessons that were specifically EEF Matrix-focused. She was adamant about providing students with resources and information that would help cultivate their knowledge base and expand their awareness of hidden social issues. Not only did she change her lessons to explicitly teach the two Matrix capacities she chose to focus on; she implemented a problem-based learning project based on the question we created on the Connecticut achievement gap. Students were asked to research, gather, and interpret information, interview state education officials, and create possible proposals or presentations that elaborated on the connections they made between their civil rights unit and the achievement gap. Jamie Lynne challenged her students' thinking in class by asking questions that encouraged them to unpack and reflect on the ideologies and beliefs that made them who they were. In one class session, Jamie Lynne asked her students,

Every year we raise money for ABC Town because we know they need school supplies. We have bake sales, sell bracelets, and then we buy school supplies and ship them off. Afterwards we feel good about ourselves, we've helped some kids in ABC Town out for the year. But what if I said, that wasn't enough? What if I said there were deeper issues we needed to address? What types of actions or movements, like the civil rights movement could we engage in as students to help bring awareness to greater issues? Who do we contact for information? How do we even start? Lets talk about this today.

In a follow-up lesson, Jamie Lynne introduced the idea that the achievement gap was a "man-made" concept put in place by a group of officials who created a name for the difference between students' educational success based on economic status. This was a particularly difficult lesson, but Jamie Lynne insisted that she needed to share that information with students, as she had just realized this and couldn't keep it to herself. As she was learning and unpacking her own ideologies and beliefs, she challenged her students to do the same.

Jamie Lynne talked to colleagues at meetings, in informal scenarios, and gave testimonials in faculty meetings about how the EEF Matrix had changed the way she viewed herself as a teacher and how she taught. She was often asked by Ted Scots and her principal to share her unit planning strategies and EEF-adapted lessons at faculty meetings, BOE meetings, and other public venues to show the public (parents, colleagues, or potential funders) how the EEF impacted her daily teaching instruction. Jamie Lynne was also appointed an EEF leader in the second phase and was in charge of helping new teachers plan and implement EEF adapted units. On the Parnell School District website, Jamie Lynne's photograph and quote about EEF reads, "I will never go back to the same way I used to teach." Jamie Lynne became the poster child for the EEF initiative.

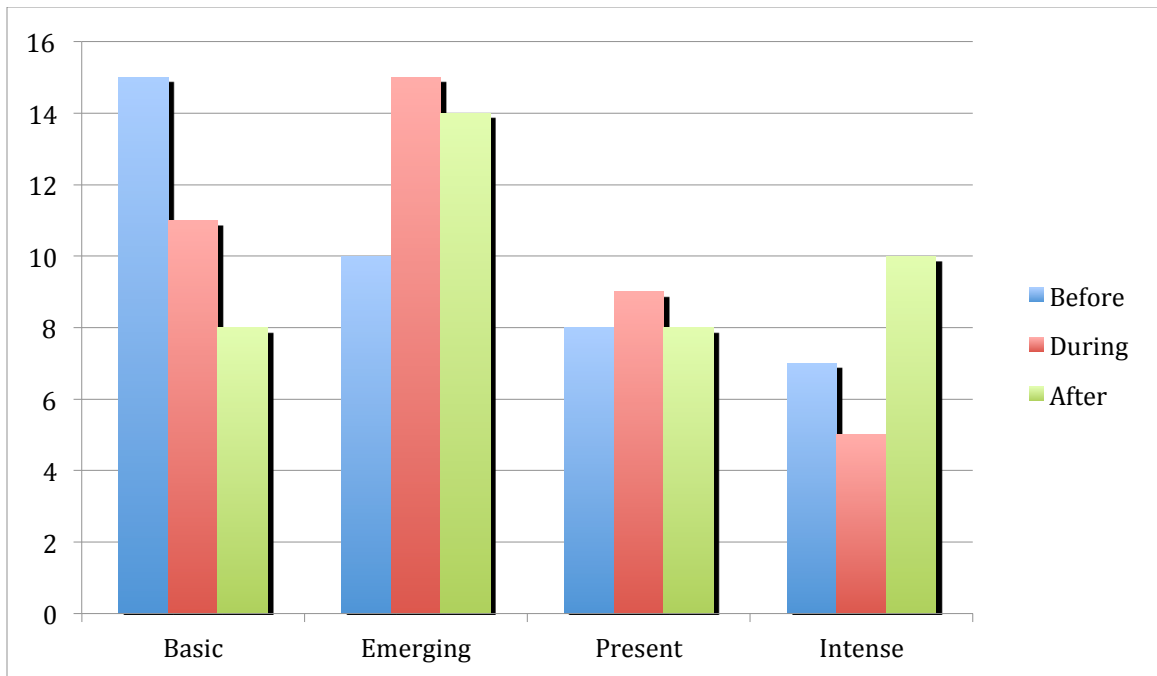


Figure 24. Teachers' Perceptions of Practice and Self-Reflections: Before, During, and After

Based on surveys I sent around before, during, and after each EEF PD session, I aggregated the responses of the 40 initial volunteers to the EEF initiative and compared their levels of perception in regard to their own practice and beliefs before, during, and after EEF PD. Teachers were asked to answer *yes*, *no*, or *maybe* to the following six questions. The sixth question followed a scale of *slightly*, *moderately*, *drastically*:

- (1) I want to learn something new in a PD session and use it in my classroom tomorrow.
- (2) Time is often limited in my day and is very important to me.
- (3) I am interested in learning something new but it must be directly applicable to my daily instruction.
- (4) I want to learn something new and am willing to explore new concepts during my Planning Time or After/Before School hours.
- (5) I want to learn something new and am looking to explore new concepts on my Planning Time or After/Before School hours.
- (6) I would like to adapt my existing curriculum.

Teachers who answered *yes* to questions (2) and (6) often remained in the basic and probing categories, while teachers who answered *yes* to questions (3) and (6) often

grouped into the present or intense categories. All of the teachers answered *yes* to question (1), indicating the importance of the relevance and applicability of PD in general. Also, some teachers who initially answered *yes* to questions (4) and (5) either remained the same throughout the duration of PD or became overwhelmed and ended up answering *no* later on in the PD phase. This directly related to the increased number of responsibilities and time commitments teachers made once they began the EEF PD initiative. It was interesting to see that a fairly large portion of teachers who had begun the EEF PD with basic or probing perceptions of practice eventually ended up in the intense or emerging category. This might imply the importance of the EEF PD, applicability and relevance to daily teaching practice, and teachers' motivation to learn more about their practice and themselves, showing teachers' willingness to grapple through difficult concepts and their high self-efficacy to tackle new ideas, even when there is no definitive answer.

### **Perceptions of Self Through Reflection and an Interrogation of Assumptions: Social Activism Taking a Central Role to Engage in Critical 21st Century Discourse**

In the DTC group, a clear theme of social activism was demonstrated across all of the teachers who displayed some type of change, whether basic or complex. This can be directly related to the explicit nod to multiple critical theories when the university partners facilitated Parnell teachers in adapting the original Global Capacities Framework into the EEF Matrix.

During the creation of the EEF Matrix, the university partners aggregated all of the Parnell teachers' selections and intentionally selected vocabulary that would offer critical readings and interpretations of student outcomes and indicators. By charging words and coupling them with words that required deep analysis of bias, impact, and origin, the result was an adapted EEF Matrix founded in critical theory. The EEF Matrix requires

those who use it to consider, race, sex, age, ability, and assumptions. The university partners supported this reasoning by suggesting that a critical approach to thinking and learning, in turn, cultivates a more global way of viewing all things in the world and how individuals make interpretations. By anchoring the capacities to take on a critical approach, teachers and students wouldn't be able to read a student outcome and take it at face value. That would result in a superficial understanding of what the student outcome was really trying to achieve. Instead, teachers would have to read each capacity and ask probing questions to really understand *why* and *what* each of the capacities meant to them and how it would translate in their daily teaching activities.

As the EEF Matrix has five large thinking categories, Critical, Creative, Collaboration, Communication, and Global, the university partners explicitly infused a critical approach to thinking and learning in the Global Thinking Column. Although the EEF Matrix is in no way hierarchical, it was clearly understood by the teachers of Parnell and suggested by the university partners and Parnell administration that the goals of the PD initiative aimed to achieve a district that was more "Global." Therefore, in many respects, the global thinking category was interpreted to be the highest category to engage on the EEF Matrix in terms of difficulty, complexity, and higher order thinking skills. The rationale was that the Global Thinking category required an individual to draw on the other four categories (Critical, Creative, Collaboration, and Communication) simultaneously in order to deeply engage in one of the Global capacities listed on the EEF Matrix, whereas, in contrast, an individual did not have to draw on Global Thinking skills in order to engage in the other four categories.

As discussed earlier, the capacities on the EEF Matrix were not to be considered discrete from one another. However, if need be, the first four categories (Critical, Creative, Collaboration, and Communication) could be engaged in without drawing on other capacities. Although this would not be the ideal way of utilizing or engaging in the capacities on the Matrix, it could be done. In contrast, the capacities found in the global

thinking category could not be engaged without implicitly drawing on capacities from other categories, even if someone intentionally tried to do so. Thus, the global thinking category could be interpreted to be the most complex out of all five categories on the EEF matrix because it required transfer of skills/capacities when being engaged. The global thinking category could also be interpreted to be the most "critical": and philosophical, as it required individuals to consider implications on humanity.

For example, in the global thinking category, the second and third capacities demonstrate a strong sense of multiple critical theories.

### **Capacity #2**

**Engaging in Global Issues:** Students will be able to analyze ethical, economic, political, scientific, and cultural issues affecting the world unintentionally and the transnational implications for humanity. This may lead to contribution of new ideas for advancing humanity.



Table 17. Analysis of Critical Vocabulary Used in Capacity #2

Intent of Chosen Text	Example from Capacity Definition	Researcher Explanation
<b>BIAS</b>	ethical, economic, political, scientific, and cultural	<ul style="list-style-type: none"> <li>- reader must consider various aspects of social impact</li> <li>- reader is required to consider the ethical implications and not just the facts/results</li> <li>- reader must contextualize their thinking on a case by case basis- reader is unable to generalize</li> </ul>
<b>ORIGIN/BIAS</b>	affecting / unintentionally	<ul style="list-style-type: none"> <li>- urges reader to consider ‘hidden’ agendas</li> </ul>
<b>IMPACT</b>	transnational implications	<ul style="list-style-type: none"> <li>- urges reader to consider how the state of the ‘nation’ is changing and how borders are no longer defined</li> <li>- reader must consider not only the consequences and changes, but the implications that affects themselves, their community, nation and world</li> <li>- reader must consider the interconnectivity of countries and continents and their influences on each other’s state of affairs</li> </ul>
<b>IMPACT</b>	Contribution/ advancing humanity	<ul style="list-style-type: none"> <li>- actively engages reader to be a participant in the capacity</li> <li>- questions readers intentions and level of agency while engaged in the capacity</li> <li>- intentionally places reader to be part of a larger picture (global community)</li> </ul>

### Capacity #3

**Perspectivizing**, Students will be able to engage in an original empathetic response informed through examining an issue from multiple perspectives (e.g., alternate theories, possibilities, other absent sources).

Table 18. Analysis of Critical Vocabulary Used in Capacity #3

Intent of Chosen Text	Example from Capacity Definition	Researcher Explanation
<b>VOCABULARY/ ORIGIN/BIAS</b>	Empathetic	<ul style="list-style-type: none"> <li>- researchers intentionally chose empathetic in contrast to the 'sympathetic', a word frequently associated with multiple perspectives. Researchers noted that the word 'sympathetic' held notions of power.</li> <li>- Reader must consider their own assumptions of power in relation to others and explicitly acknowledge their stance in order to make conclusions</li> <li>- By choosing an alternate word, researchers provided readers and opportunity to question assumptions and examine underlying themes that may not have been examined</li> </ul>
<b>BIAS/ORIGIN/ IMPACT</b>	alternate theories, possibilities, other absent sources	<ul style="list-style-type: none"> <li>- readers are explicitly prompted to examine and explore "the other," "hidden agendas," "missing voices," "the periphery," and power dynamics of choice (who chooses what is in and what is out?)</li> </ul>

Discussions examining the critical nature of the student outcome descriptors found in the EEF Matrix were facilitated by the university partners in the PD sessions from start to end of the initiative. At times, the discussions were driven by necessity, taking a basic approach to understanding the capacities. In these sessions, teachers discussed definitions of singular words out of context and re-worded student outcomes into easier language using synonyms to capture a basic understanding of the capacity. These discussions fulfilled the immediate need teachers had to understand a document that was causing confusion.

In other sessions, teachers moved beyond word-smithing the student outcomes into easier language and instead began considering who the capacities impacted and why the

words were chosen by the university partners. In these meetings, university partners could share their thinking and some literature on various critical theories. Sometimes this provided teachers with different perspectives, pushing them to question their initial beliefs and perceptions. At other times, it reinforced teachers' understandings and ways of looking at social constructs.

Finally, in a few sessions, teachers engaged in a discussion that not only drew on the multiple critical theories that anchored the student outcome descriptors, but pushed thinking to consider impact on oneself, community, and humanity, and the power dynamics/origins of these possible implications.

A majority of teachers felt obligated to engage in some sort of social action after these discussions. Although the range to which teachers actually did or didn't is unknown, teachers' perceptions of their roles as individuals in society, let alone as teachers, changed. They proclaimed renewed energy, motivation, and agency to prepare the next generation to be fully prepared for what the 21st century had in store for them. In addition, many of them aimed to "uncover the wool that's been pulled over everyone's eyes." For example, in a Mathematics class focused on the order of operations, two teachers decided it would be important for students to explore social issues, even in a math class that was focused on technical and foundational skills. The teachers thought that if they created a word problem that included global issues, students would have the opportunity not only to demonstrate their content knowledge but would get to discuss a global issue/topic they wouldn't have normally addressed in a math class. The two teachers planned to create the following question for students to solve:

UNICEF has donated a large sum of money to Education officials in a rural town in India to distribute among their schools as they see fit. Each of the rows below is the amount of funding the Education Officials in Kansera, Rajasthan, INDIA has decided to put towards a particular school.

Row A Girls School: (teachers would input a mathematical sequence here that required students to solve an order of operations problem)

Row B Boys School: (teachers would input a mathematical sequence here that required students to solve an order of operations problem)

Solve each problem and find out how much funding is going to each school. Why do you think the education officials unequally distribute UNICEF's funds? Explain your thinking.

The two math teachers shared that the question they created forced students to think about gender inequality, what equality meant in other countries, and the rights of children. They were excited that topics like these were now going to be part of the math curriculum. They perceived themselves to become agents of promoting more 21st century ways of thinking and perceived their work as teachers as more than just teaching specific content across disciplines. The teachers came to perceive throughout and after the PD process that they were now teachers of content, citizenship, and critical thought.

Similarly, in a Spanish world language class, a teacher responded, "Thanks again for the opportunity to be involved in this project. I was most inspired by the notion that the work we are doing is all in an effort to produce 'globally responsible citizens.'" She planned to ask students to write a comparison paper on Venezuela and another country of students' choice, but questioned whether students would go onto the Internet and Wikipedia Facts about the countries and put it into essay format to submit to her. Rather, she wanted students to engage in a meaningful and socially just project to demonstrate their attempt to engage in multiple perspectives. She decided to create an "energy inventory project". Students would have to research real facts and statistics about an average Venezuelan's energy consumption and compare it to his/her own energy consumption in the United States. She hoped that the project would achieve the following: provide students an opportunity to (1) learn about Venezuela, (2) learn about their own energy consumption to reconsider the concept of conservation and excess use or waste, (3) compare and empathize with cultural differences, (4) realize that stereotypes or generalizing comments do not represent an entire culture, and (5) shed light on what it means to be socially active. After the energy inventory project was complete in her class,

the teacher reflected on areas she could improve by pushing her students to think more critically and more thoughtfully. She wondered how she might adapt the energy inventory project again in order to raise more social agency among her students. The world language teacher also initiated a small student group during one lunch hour a week that would connect with students from a Spanish-speaking country via SKYPE. She hoped that the "pen pal relationship" would provide her students and the students from the other country different perspectives on culture and other social issues. The world language teachers' pen pal lunch group can be interpreted as one way she became a more socially active role model for her students.

The various examples and discussions examined in Chapter IV provide insight into the EEF PD initiative and the changes that occurred in teachers' daily instruction and perceptions of educating for the 21st century. The evidence analyzed offers the wide range of variables that impacted teachers' self-efficacy and ability to change, whether in practice or attitude. Chapter IV examined how various teachers across disciplines and grade levels approached the six-step instructional design to demonstrate the interconnectedness of PD conditions, teachers' self-efficacy, and change in practice. What emerged from these findings was a consistent change toward more socially active teaching and a discourse founded in critical theories and 21st century themes. The following chapter will discuss the emerging discourse; altering perceptions; discussion of critical theories; and the attempt to become more global in relation to three English literature teachers' experiences with the EEF PD initiative. In Chapter V, I call the discourse that emerged a Critical 21st Century Discourse.

## Chapter VI

### A MICRO STUDY OF THREE ENGLISH TEACHERS: ADOPTING NEW IDEAS AND CONCEPTS IN FOUR STAGES

#### **Acknowledging Social Issues: Two Mandatory Goals**

I would hope that by the time a teacher enters the profession, he/she is aware of social issues that are at the root of many of the world's problems. Although this statement seems absurd (the possibility of an individual unaware of social issues), it is necessary to consider a population of people who do not acknowledge, either by choice or naïveté, the social differences that make up our world. As we continue to navigate our way through the 21st century, it has become clear that understanding how different cultures and people live, work, and exist is a necessary understanding and perspective to possess in order to negotiate the encounters we have with people (Nussbaum, 1997), either virtually or in person. Acknowledging the multiple identities of a person and understanding the ideologies and beliefs that constitute a person's way of thinking are understandings necessary for citizens of in a more globalized community. One might say we need to be citizens of the world in the 21st century (Nussbaum, 1997). Or, it might be important to suggest a need for multiple perspectives and agility of mind (the ability to move across space and time to understand the perspectives of others). Other viewpoints on successful 21<sup>st</sup> century skills includes. More cosmopolitan propensities (see pg. X) in order to engage with a globalized community.

During the EEF PD Initiative, I drew on a variety of 21<sup>st</sup> Century related theoretical and pedagogical discussions on the teaching of literature to support the PD sessions. As described earlier, I focus specifically on three 10<sup>th</sup> grade English teachers t Parnell School

District for the micro- study. Martha Nussbaum's *Cultivating Humanity* and various scholars discourse on Cosmopolitanism, cosmopolitan citizenship, world literature, creativity, and critical discourses of schooling served as a guide to how to engage these teachers in discussion of how their literature curriculum and assessments might support as more informed global/21 Century approach to teaching literature.

Throughout *Cultivating Humanity*, Martha Nussbaum proposes an inclusive curricula where literary works beyond the western canon are included. These are intended to address the need for a more global view of humanity. One of Nussbaum's main questions is how literature education can educate citizens of the world? She specifically investigates, "what sorts of literary works, and what sort of teaching of those works, our academic institutions should promote in order to foster an informed and compassionate vision of the different" (Nussbaum, 1997, p. 89). Nussbaum challenges traditional elitist notions of literary study and criticism by exploring how literary criticism can act as an undercurrent to societal improvement and more importantly, democratic education.

Nussbaum draws on examples of Socrates's plight for a more "liberal" education as a way of describing how particular types of knowledge are liberatory. An education that "liberates the mind from the bondage of habit and custom, producing people who can function with sensitivity and alertness as citizens of the whole world" (p.8), to define the 'cultivation of humanity'. She bases her argument for the cultivation of humanity through an examination of three capacities: First, the capacity to critically examine oneself and one's traditions. Second, the capacity to see oneself as a human being who is interconnected with other human beings around the world, and third, the capacity to

engage with a ‘narrative imagination’, the “ability to think what it might be like to be in the shoes of a person different from oneself, to be an intelligent reader of that person’s story, and to understand the emotions and wishes and desires that someone so placed might have”.

Two very clear messages run through Nussbaum’s narrative of Cultivating Humanity and that is (1) we all bring our own traditions, beliefs, ideologies, and assumptions to situations and encounters with other people. It is imperative that we acknowledge who we are and the history of how we came to believe the things that we do in order to truly empathize with others, as we are all interconnected by the sheer fact of being human. This self-examination allows us to suspend judgment and foster compassion for ‘the other’. (2) We must take active roles in critically examining and troubling, through Socratic questioning and reasoning, conventional beliefs and the roles of power in various situations. According to Nussbaum, the reason for engaging in this critical examination of self and existing power structures is to achieve the final end goal of ‘seeking the common good’ and cultivating ‘empathetic citizens of the world’.

I did not elaborate in depth about Cosmopolitanism or Cosmopolitan citizenship in this study, but it was necessary to consider definitions of both terms, in the context of education, to provide an understanding of how the EEF PD Initiative evoked cosmopolitan propensities by way of using the EEF Matrix: A cosmopolitan citizen is an individual who moves beyond tolerating others and, rather, engages with them (Hansen, 2011; Mehta, 2000) by empathically responding to others and their experiences (Nussbaum, 1997). Cosmopolitanism draws on the many identities of an individual with the notion of transnational citizenship (Heater, 2004; Ong, 1999). A cosmopolitan citizen



moves beyond the boundaries of the nation, simultaneously situating herself within the larger and borderless community of humanity (Lu, 2000). Cosmopolitanism requires “recognition of difference, beyond the misunderstandings of territoriality and homogenization” (Schoene, 2011, p.100);.Lastly Robbins (1998) states cosmopolitanism is “understood as a fundamental devotion to the interests of humanity as a whole, cosmopolitanism has often seemed to claim universality by virtue of its independence, its detachment from the bonds, commitments, and affiliations that constrain ordinary nation-bound lives” (p.1).

### **Research Purpose**

As discussed throughout, this study documents the development of a PD initiative that investigates what students need in order to be competitive citizens in a global 21<sup>st</sup> Century. Chapter VI provides an in-depth analysis of the second portion of the research purpose where I document the experiences of three tenth grade English teachers that engage in the EEF PD initiative that was intended to help them think about the skills students and they themselves, as educators would need for the 21<sup>st</sup> Century.

### **Research Questions**

- (1) How does a district-wide PD initiative focused on educating students for the 21<sup>st</sup> Century impact teachers’ examinations and revisions of assessments, curricula, and instructional activities?*
- (2) How does a district-wide PD initiative focused on educating students for the 21<sup>st</sup> Century impact three 10<sup>th</sup> Grade English teachers’ examinations and revisions of their literature curricula and instructional activities?*
- (3) What factors influence the ways teachers react to the PD plan implemented in the EEF initiative?*

### **Overview: A Micro Look at Three 10th Grade English Teachers**

In this chapter, I examine a small slice of the PD initiative through the experiences of three 10th grade English teachers and their experiences adopting a Critical 21st Century Discourse. It was during my time with Jason, Cynthia, and Peter that I drew on Bruner's (1960) model of four stages of learning that lead to new ideas and conceptual understanding. Drawing on Bruner's model and using the data I collected, I matched the emphasis of my work with Jason, Cynthia, and Peter to the four stages of learning. Bruner described a four step process learners experienced in order to create new ideas, conceptualize, make decisions, and interpret. His four-step process included: transformation of information, decision making, generating hypotheses, and making meaning from information and experiences. This directly related to Jason, Cynthia, and Peter's experiences with the EEF PD Initiative cultivated through the activities they engaged in during PD sessions. I used Bruner's four step process to draw parallels to the EEF PD Initiative. In stage one, when teachers were 'transforming information', according to Bruner's theory, the three teachers were gaining new knowledge and historical context of education concepts they may or may not have been familiar with. In stage two, when teachers were 'decision making', the teachers were encouraged to question the new knowledge that was being presented to them and self-reflect on their own personal experiences leading up to becoming a teacher. In the second stage, teachers re-evaluated their assumptions by questioning/interrogating where and how their current ideologies and beliefs came to be and how they impacted their philosophies of teaching and roles as teachers. In Bruner's third stage, 'generating hypotheses', teachers attempted to apply what they learned (both new knowledge they gained and what they may have learned about themselves through self-reflection) by modifying classroom instructional

activities and their daily pedagogical approaches. Lastly, in the fourth stage that Bruner refers to as the ‘making meaning’ stage, I correlated teachers’ adoption, or lack of adoption, of a new discourse. A discourse that they would not have been part of if they hadn’t gone through the activities and reflection exercises leading up to the last stage. However, as you will see, all three teachers did not make it to stage four of Bruner’s model due to various reasons that will be discussed.









	Stage One	Stage Two	Stage Three	Stage Four
<b>Bruner’s Four stages of adopting new ideas and concepts</b>	Transformation of Information	Decision Making	Generating Hypotheses	Making Meaning from Information and Experiences
				
<b>My Interpretation in Context of the EEF PD Initiative on Adopting a New Paradigm</b>	New Knowledge Consumption: Historical Context	Re-evaluating Assumptions by questioning/interrogating where and how their ideologies and beliefs originated from and how it impacts their philosophies of teaching and roles as teachers.	Application of New Knowledge & Situating Knowledge in the Familiar and Authentic Meaning Making to Impact Future Knowledge Consumption	Adoption of a new Discourse
				
<b>From the Data Analysis: How Jason, Cynthia, and Peter Adopted/or didn’t adopt a Critical 21<sup>st</sup> Century Discourse</b>	They <b><u>Learned</u></b> about: <ul style="list-style-type: none"> <li>• Various Schools of Thought on Education</li> <li>• Globalization in terms of World Literature</li> <li>• Creative Models/Processes and how to structure their classrooms to be more conducive to cultivating Creative Thinking</li> </ul>	They <b><u>Questioned</u></b> and engaged in <b><u>Self-Reflection.</u></b>	They <b><u>applied</u></b> what they learned.  Through discussion and modifying their classroom instruction and activities to reflect the use of their new knowledge	They <b><u>adopted</u></b> a Critical 21 <sup>st</sup> Century Discourse.  (The study will indicate whether or not Jason, Cynthia and Peter ever reached this stage)

Figure 25. Four Stages of Adopting a New Concept

The discussions that were most meaningful to analyze for this portion of the study took place leading up to and during the third stage, when Jason, Peter, and Cynthia were asked to re-evaluate assumptions based on the EEF Matrix (see Table 8). The discussions that took place were expansive and deep in many sessions and brief and confused in others. To narrow the scope of these conversations, I chose to focus their examinations of the critical, creative, and global categories found on the EEF Matrix to provide examples and analysis of how they began to trouble underlying assumptions and how the Matrix impacted their perceptions of what 21st century education should encompass. An informative handout, intended to prompt thinking in each stage, was presented in the PD work. Those handouts were ‘mini-literature reviews’ specifically created to provide historical context, alternate views, current debates, and to trouble existing notions of schooling. There are seven handouts in all and they are part of the appendices (see appendix A-G).

### **Parnell HS Teachers: Jason, Cynthia, and Peter**

The three teachers chosen for this study were intentionally selected based on their grade level, discipline, common planning times, and varying years of teaching experience.



*Figure 26. Three Tenth Grade English Teachers*

Jason was a novice teacher in his mid-twenties who had been teaching for two years and had no previous career experience in other fields. Cynthia was a more seasoned teacher in her mid-thirties who had been teaching for eleven years and also did not have any previous career experiences outside of teaching. Both teachers graduated from postgraduate programs and went directly into teaching. Peter was considered a novice teacher based on the number of years in the field but brought with him experiences from a previous career of eleven years where he worked in trade book publishing in New York City at Big Blue & Company, which was part of Time Warner and Random House. Although he had only been teaching for one year, he was in his late thirties and brought with him a maturity and expertise in English literature publishing that certainly impacted his teaching and learning on a daily basis.

Of the eight teachers who made up the English Department at PHS, these three were chosen for two main reasons: they all taught tenth grade English and had similar or same planning times. Cynthia and Peter shared planning times each week and worked together to plan throughout the year. Jason did not share planning times with Cynthia and Peter but worked closely with the curriculum instructional leader (CIL), Florence, of the department as a new teacher to the district. The remaining five teachers in the department were not chosen to be part of the individual case study portion of this study but were included in the background and contextual information about the department, high school, and district that was used throughout the overview and analysis sections in Chapter V.

Since my study was investigating how teachers and their practices were impacted by the district-wide PD initiative, a brief overview of each teacher's professional experiences and reasons for becoming an English teacher, followed by their beginning understandings and perceptions of 21st century education and their daily practice of teaching literature, is included in the next section. These insights offer a baseline for each

teacher that acts as a starting point for his or her upcoming professional development experiences.

### **Teacher Profile #1: Jason**

Jason often entered meetings, interviews, and his classroom on a daily basis, wearing a brown corduroy blazer with leather patches on the elbows, carrying a jam jar filled with coffee. His hair, tossed and full of curls, reminded me of an Albert Einstein photo I once saw hanging in a Science classroom. Jason, a young teacher in his twenties, took a lifetime, as he recollects, to arrive at the decision of becoming a high school English teacher. He told me his love of the subject and his affinity for working with kids drew him to the teaching profession. He wanted to be someone who could inspire students to

Read the work of others, whether it be, you know, famous renowned authors or their peers, but to be able to read the work of others, so that they can understand and internalize and then use that understanding and internalization to make some application to their own life.

He professed that if students weren't taking what they understood and applying it to their own lives, then there wasn't much point to schooling or his existence as a teacher. Cataloguing ideas and not using ideas seemed to be the worst possible action students could do with the knowledge learned in schools. He shared a romantic view of what it meant to be a teacher (leather patches and all) and provided an ideal notion of what it meant to educate. Jason was a new teacher. I originally stated in the margins of my observation notes that he was a "novice" teacher, but after working with him and reviewing his transcripts, it was clear that he wasn't "novice" in any sense other than the limited number of years he had been teaching. In 2011, Jason was completing his second year of teaching. His first year was in a school district not far from Parnell, but one that differed socio-economically and demographically. Jason was thoughtful and pensive in many of the meetings and interviews we had and never failed to ponder ideas deeply

(he'd often furrow his brow and say, "Let me think about that for a minute") before responding. He offered philosophically anchored and profound reflections throughout PD sessions and added insights of a seasoned teacher during group interviews.

Whenever Jason shared what he thought a 21st century education encompassed, many responses began with the emphasis of learned compassion for fellow human beings.

I think empathy is a learned skill for a lot of people. I would hope that by the end of high school they had learned to empathize, because all of these things are gonna make them just better equipped to cooperate, to collaborate with other people, to make the world a better place. I think in an English classroom every time they study a character, they're learning to empathize, understanding from the perspective of that character or characters, the perspective of writers, and compassion is something that in an English classroom again we study the lives of other people, we study the ideas of other people, and I would hope that my students end up becoming compassionate.

He hoped that as a teacher he could inspire students to think creatively.

Creative thinking is making extensions upon what you already know when we ask our students to think creatively we're asking them to take the information that they already have at hand, maybe that we've taught them or that they've gathered, and to put it together in a unique way.

He wanted to help students situate themselves within a larger existence than just themselves.

Being aware of the fact that you don't exist in isolation and that what you're learning is not for the sake of a contained existence, how is what you're doing going to have impact upon the world at large and the interconnectivity of the world in the 21 century?

He wanted them to be able to apply their knowledge in meaningful ways by finding authentic outlets for their thinking and ideas.

Okay, you've learned something but put it to use in a novel situation. Skills are a type of knowledge. I've given you these skills, I've given you this information, now you have become more knowledgeable. Where will you use it, when will you use it? Well when and where you use it is you applying it.

Everything Jason hoped he could inspire his students to do encompassed skills and habits of mind Jason considered necessary in the 20th century, the 21st century, and even the 19th century. He pointed out that the only difference "back then" was that those very skills (to think creatively, apply knowledge, generate original ideas) were expected of aristocracy, the rich. Today, however, those same skills are and should be expected of everyone.

You're entering into a world that is unpredictable, fraught with new challenges and you have to be a flexible thinker. I think it also means that you're entering into a world with problems that are being presented to thinkers that are more complex and require a higher degree of cooperation and collaboration to solve those problems. You need the skill, the ability to collaborate and cooperate -- to be, a part of your repertoire.

Jason was eager to begin the PD initiative because he knew what he was doing in the classroom was already well aligned with how the district was hoping to change for the 21st century. He shared his hopes to learn more and to try new things in his classroom. He demonstrated enthusiasm and energy of a new teacher willing to learn as much as possible. He was looking to be inspired himself. He was looking to call something (the initiative) his own. He wanted to be the best teacher he could possibly be.

### **Teacher Profile #2: Cynthia**

Cynthia greeted me with a warm but nervous smile. She wondered what our interview had in store. As the remainder of teachers left the presentation that had just let out, Cynthia jokingly clapped her hands together and said in a voice loud enough for her surrounding colleagues to hear, "Okay folks, show's over, we've got work to be done here. Let's go, that's right get movin' buddy, we don't have all day here." The first interview was set to take place after school from 2:00 to 2:30 PM. She knew the later the interview started, the later she would be in returning to her room to grade the stack of papers sitting on her desk. Earlier in the presentation, Cynthia had also raised her hand



midway to request that the leader of the presentation postpone the upcoming assessment building activity until after Spring Break. She spoke on behalf of everyone at the high school who was swamped with extra work and deadlines, asking for some understanding from administrators to lighten their loads.

Whether everyone in the room felt the same as Cynthia, nobody raised their hand to object to her request. Just a few minutes prior to that, Cynthia had been asked a question by the presenter. Cynthia answered and then laughed aloud saying, “Florence is that right? Did I get that right?” Although only a joke, Cynthia looked to Florence, her curriculum instructional leader and direct supervisor, for affirmation. Did she answer the presenter’s question with enough information? Did her answer stand up to her CIL’s expectations? Did she pass the pop quiz? Cynthia was a seasoned teacher in the number of years in the profession but definitely felt like she was just managing to stay above water. She demonstrated signs of stress and being overworked. She was certainly aware of being evaluated by her superiors. Cynthia was not in her teacher evaluation year, but was on the steering committee that oversaw the school’s state-wide annual evaluation. It was possible the state-wide school evaluation was directly impacting Cynthia’s level of stress, which was being manifested in nervous laughter, acts in seeking affirmation, and uneasy feelings of the lack of time.

Cynthia was in her eleventh year of teaching in 2011. She had been a teacher since she graduated from college. She became a teacher because she loved kids and enjoyed English as a subject. She decided to teach at the secondary level because:

it was more, I don’t know, I felt better teaching at the high school level and there’s a level of, sarcasm that you can’t have in the lower grades, which would make me fail miserably there, so, um, but yeah.

Cynthia’s main goal as a tenth grade English teacher was to ensure that students

kind of get these lessons that we’re always trying to teach them. In terms of teaching empathy, in terms of teaching, you know, why are we reading *To Kill A Mockingbird* still? For them to understand that these issues that we’re

dealing with, they should see based on these books or these characters or whatever else it is that we're dealing with, um, maybe their interpersonal relationships could be different. Maybe there's something there that they can just learn from just to be a better person in the world. I mean that's kind of huge, but you think little things could make a difference.

She strongly believed that students would need to understand what it meant to be empathic for the 21st century. She hoped that her English 10 class would somehow teach this through the pieces of literature the students analyzed and focused on. Cynthia also emphasized the importance and transferable nature of being able to think critically as a way to be prepared for the 21st century,

because I really do think it's that critical thinking, not just for them to do well in other English classes or other classes in the high school but when they're off at their Ivy League colleges, I mean that's really what it is. If they can sit there on the spot and be not just able to think but want to think, I mean, you know, there's something that we're trying to – we're trying to engage them, in ways that make them wanna question and make them want to consider things differently I suppose.

Teaching students how to be empathic and to think critically were the two main traits Cynthia believed students needed for the 21st century. She was proud to say that she was already teaching them how to do these things, and, therefore, she was confident and happy that she was in fact already teaching for the 21st century.

When I asked Cynthia to share her thoughts on the English 10 course description that states, "...through world literature" (see table X), she asked, rhetorically of course, "We do that here?" She then went on to clarify that the course descriptions were dated and needed a change -- that in actuality it was not "world literature" that was being taught at PHS per se, but rather seminal pieces of American Literature, and one British text, which acted as a foundation for students to think in ways world literature would require. Cynthia explained that where students would have engaged in empathy and different perspective, they could do so using the American Literature outlined in the courses syllabus.

Hearing the different voices the different perspectives, um, I mean I'm thinking back to where I taught before here. We had a world literature book, one of those huge anthologies, Prentice-Hall anthology. It was like, okay, now we're going to read, um, I can't even remember how that book went 'cause I did not like teaching that class 'cause I hated the book. It was always from something too. It was always excerpts of something, so they just got like a little taste of it and moved on, and it was like, uh, that's not exactly what we're trying – we're not just trying to get in as much as we can, but I think it is that, you know, and we have talked about adding more world voices. But I mean the first book that they do junior year is *Huck Finn* and to jump into that is hard for a lot of them, but being that we have more complicated texts, we have *Lord of the Flies* second semester, we have, *Fahrenheit 451* second semester, you know they're forced. We even notice it with the short stories that we're doing with them where this year especially they need a little more help with those nuanced views and interpretations. But they definitely have to see different perspectives and empathy, like in *To Kill a Mockingbird*.

Cynthia was able to point out two skills she taught and knew had to be part of a 21st century education but did not deeply articulate or understand what those two skills could be if placed in a more global setting. Although she considered the American Literature in her syllabus to be adequate opportunities for students to engage in empathy and different perspectives, it was clear she was not completely sure of herself. As the clock approached 2:30 PM, levity was brought back to the room when Cynthia said with laughter, "Oh, well it's 2:30, that's that, Alison! No just kidding, do you have more questions?" Although she offered to answer more questions, I knew it was good time to stop. 2:30 PM was an important milestone for Cynthia. One minute beyond, and that laughter and joking attitude may not be present the next time I see her.

### **Teacher Profile #3: Peter**

In 2011, Peter was considered to be a novice teacher solely based on the number of years in the profession. Peter was completing his first year of teaching, and in the eyes of the teaching profession, he was a "new" teacher. Interestingly, however, Peter was in his mid-thirties, knowledgeable of his craft, confident in speaking of all things related to English Literature as a teachable subject, and bore a slightly arrogant and defiant manner.

This could have been directly related to his previous career as a book editor at B&B publishers, where he spent 11 years reading, writing, critiquing, and carefully selecting books he thought were worthy of being published. A certain amount of hubris followed him from class to class and was clearly evident during his interviews throughout this study.

A sarcastic laughter filled the room when I asked Peter why he decided to become a high school English teacher after so many successful years in the publishing industry. He leaned over and loudly professed, "I really liked the idea of summers off. Just kidding, just kidding!" This is just one example of Peter's many characteristic building remarks that painted him to be fun-loving, not too serious, but very sure of himself and his abilities as a teacher are interwoven throughout the many transcripts of him talking and discussing his experiences in the EEF PD initiative. In actuality, it wasn't just the summers off that attracted Peter to become a high school English teacher; rather, it was his adolescent experiences with texts and literature that helped him decide which professions to seek out after college. There is a clear connection of working with words and literature that bridges his past career as a book editor and his current profession as an English teacher.

No, I mean I worked with words my whole life. I mean I loved being a high school English student. I thought hey, that was a pretty cool time in my life. How can I get back there and maybe make it a cool time in someone else's life? I did a lot of soul searching, Alison!

When I first met Peter, his outgoing and talkative personality immediately caught my attention. I made a mental note to myself that I would have to be very purposeful when interviewing Peter in small group scenarios. I was worried he would overpower group dynamics by sheer volume of things to say or with his fun, yet intimidating, manner of making jokes, which might leave colleagues silent in group interview settings (Boler, 2004). There was one other trait that immediately caught my attention upon meeting Peter, and that was his intensely deep knowledge of literature and ability to draw

interesting interpretations, analyze, and formulate innovative ideas. It was clear from the start that Peter had read widely across many genres, not only the ones taught in the Parnell English Department. He could draw on worldly experiences (or so it seemed; I never found out if he travelled extensively) to support his conjectures and thoughts. My first impression of Peter was that he was a profound thinker, a teacher who sounded more like a university professor of literature or philosophy. Throughout the study, I made note to observe whether my first impression was merely that, a first impression, or an accurate and consistent depiction of who Peter really was as a thinker.

Peter's main goal as a tenth grade English teacher was to cultivate students as thinkers and people with ideas. He believed this was the way to prepare his students for the 21st century and what the 21st century would need: people who could think, generate ideas, and communicate them in an articulate manner.

I mean it's kind of like you want them to become better writers and you spend a considerable amount of time in, written expression, but ... if you don't have an interesting viewpoint, if you can't take ... the literature we look at and even some of the other media we look at and form an opinion, then the writing is ... after the fact. It should be a vehicle for your ideas. If you don't have ideas, then what's the point?

Peter wanted his students to understand the reason for being in his English class. He wanted his students to be able to look back and use what he taught them after they graduated. I suppose, in a sense, he demonstrated a romantic notion of what it meant to be a teacher.

For students to begin to realize how everything that they did hear sort of has purpose in their adult lives. I want them to look back at what ... I do in English 10 ... and say, "Oh, we had to talk about this character in terms of this context and that's really sort of how I'm supposed to approach, ... this work situation or this higher learning situation or I've got to figure out a way in this ad agency," like all that stuff that we do. I guess I hope that that's what they know when they leave here, that it was all for a purpose.

At the end of this statement, Peter laughed boisterously, flung his arms in the air and said, "I know it probably sounds all hippie dippie pie in the sky, but that's what I really truly

believe we are here for." As he described his perceptions of what he does as an English teacher, the same boisterous laugh started him off to say,

Well you know, sometimes I just want to say, do this. As a teacher of English 10, when I like just want them to follow the rules, like, "I told you I need a topic sentence! Where's the topic sentence? You did not introduce this quotation." They're sort of learning to master the rules.

But then he quickly retreated and took on a more serious persona to reveal,

No, no, really, on a daily basis I just say to them, "Tell me something new or tell me something original." It's so frustrating and so annoying to them, and it's annoying to me to say it because I know how obnoxious it sounds, but for example I just said on their midterm, you know, "Tell me something." "Tell me how this belongs in the connection. Find an interesting angle ... learn to make the rules work for you and learn to start breaking the rules.

As Peter pointed out initially, he was creating, or at least trying to help prepare, a generation of independent thinkers with new ideas by using literature as a vehicle. He went on to give an example of how he was accomplishing this by describing a typical dialogue with students when reading Ovid's *Metamorphoses*. His goal was to push students further than their usual literal interpretations of Daphne changing into a tree. He emphasized how literature offered students scenes and examples of actions or phenomena that students wouldn't find in real life but could find in literature. It was clear that Peter perceived literature to be a necessary and important instrument for generating new ideas in the 21st century.

Peter also implicitly acknowledged that the English 10 curriculum at Parnell offered students different perspectives to consider. When asked to describe the "world literature" portions of his curriculum, Peter had to consider exactly what "world literature" meant in the English 10 curriculum and whether or not the "world" was represented in their yearly plans. After quick consideration, Peter formulated a possible answer to reconcile the English 10 course description that states "...through world literature" and his implicit acknowledgement of the obvious absence of world literature in his own daily teaching to answer

the thing about world literature.... Is that what you would expect is that you're hearing world voices, lots of texts and translation, you're hearing perspectives from different cultures, from different corners of the globe. You know, an African writer, an Indian writer, a Korean writer, a French writer. In English 10 it means something a little bit different. You know I use the *Norton Anthology of World Literature*, and of course I can only get through like a thin sliver of it and it's thousands of pages, but we start with – We start with *Gilgamesh*, the oldest text. It's from Mesopotamia. It's from – so we start with the oldest recorded narrative. We move through selections of the Hebrew Bible and Homer. We look at Ovid and *Metamorphoses*. Hopefully by the end of the year, my timeline this year is a little bit different than it was last year, we get all the way up to the Romantic poets, if we can get that far, I'm about to start Dante. So world literature in the sense that we're seeing some of the oldest texts from the seat of Western civilization, I guess, particularly when we get to Dante, but it's not, like as I said, I don't have like a Chilean writer. It's not like, the United Nations of literature, but it is world literature. It's the source, right? World literature personally to me is kind of a – I don't know. I think it's a term they use in an educational setting. I don't think anyone like – who's an active reader is like, "I like world literature."

Peter indirectly alluded to the notion of different perspectives being important for the 21st century and the potential lack of perspectives, in terms of underrepresented non-Western voices in Parnell's curriculum.

From this, I left the discussion, curious to see if he might introduce some non-Western writers to his curriculum as a result of the issues raised through the PD with considerations particularly of global emphases. I envision him flipping through his *Norton Anthology of World Literature* upon returning to his classroom, scanning various pieces from writers around the world, asking himself, "I wonder if I can work the theme of colonialism into this text...?" but, of course, this is only my hope.

### **English 10: A Pivotal Year for Students and Teachers**

To begin discussing concepts of nation/world and globalization, the English 10 unit on world literature was used as a vehicle to examine issues of borders and boundaries. Tenth grade is considered a transitional year in English for students at Parnell High

School. The tenth grade teachers of English perceived the second year of high school to be

a pivotal year, kind of a transitional year in my opinion between, childhood and, young adulthood in terms of your ability to think and reason ... the whole purpose of English 10, which is you've graduated from ninth grade where there's the culture shock of the expectations of a high school, how quickly you read a book, how you're supposed to formulate a response, and then tenth grade is where you really have to demonstrate, proficiency on your way to mastery so you can get to the sophisticated texts and written assignments of English 11, which is American Studies, and whatever senior course you're taking ... there's a lot of nuance that we introduce sophomore year (Interview, Peter, 2011).

It was in tenth grade that students learned the principles of research through a shared experience called the sophomore research paper. According to the tenth grade English teachers at PHS, this research paper was an innovative project that put all of the skills students learned in English in concert with the skills needed in research. Students needed to demonstrate their understanding of various authors' choices in texts, and deep analysis of passages read throughout the year, with the creation of an original short story at the end of the project. Teachers at Parnell perceived the sophomore research paper to be a benchmark project. In addition, it was mandatory in order for students to graduate.

Advertised in the PHS Program of Studies Handbook, the course descriptions for English 10 are as follows:

*Table 19. Course Descriptions of English 10-11*

English 10	Exploring the major concepts of <i>Change, Patterns, Conflict and Power</i> . Close reading and analysis of selected literature deals with external and internal journeys and goals as portrayed in world literature. Classroom discussions, oral presentations and writing responses reflect understanding. Every student must complete the Sophomore Research Project with a passing grade as a <b>graduation requirement</b> .
English 10 Honors	While all Parnell High School Language Arts courses are rigorous in addressing foundational competencies, some students may be able to meet the more complex demands of honors courses. The tenth grade concepts of <i>Change, Patterns, Conflict and Power</i> are delved into



	<p>through deep analytical ideas in some of the same reading as well as additional novels and corollary materials. These analyses are communicated through extensive discussion, oral presentations and extensive writing. Students develop perspectives on these concepts through close reading and analysis of selected novels, short stories, non-fiction, poetry and films that deal with external and internal journeys and goals as portrayed in world literature. These ideas are shared through classroom discussions and communicated through oral presentations and extensive writing. Completing the Sophomore Research Project with a passing grade is a <b>graduation requirement</b>. Preparation for the CAPT is embedded. A summer reading assignment involving a written response is required to prepare for the course. Requirements for admission to this course:</p>
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In the course descriptions, English 10 is anchored by themes intentionally chosen by the curriculum instructional leader and teachers of the department. In addition, according to the course description, English 10 is when students engage with world literature in order to explore the conceptual themes for the year. However, English 10 teachers' interpretations of what world literature was and how world literature was used in the classroom vary from teacher to teacher.

In English 10 world literature means something a little bit different. I mean, we are showing the kids multiple perspectives from different walks of life within America and some perspectives from abroad, but world literature as it, uh, appears in the English 10 curriculum is less multi-national and a little bit more multi-cultural across the sociological spectrum I guess (Interview, Peter, 2011).

### Stages One and Two

As globalization has obviously altered the concepts of space and time, stages one and two of learning among teachers during the EEF PD initiative focused on new knowledge acquisition. I wanted Jason, Cynthia, and Peter to explore alternate ways of considering pedagogy for the 21<sup>st</sup> Century by considering the tensions between nation and world and considering how some structures in schools and curricula continued to prepare students to become economic assets, demanded normalcy, and potentially reified

hegemonic power and marginalization. I often referred to the use of literature as seeking to extend the local to the global (see Appendices A, F, & G). Using handouts (see Appendices E & D) and group discussions, I offered mini-literature reviews in the first two stages of learning so Jason, Cynthia and Peter increased their historical knowledge (reproduction theory, Americanization, contrasting philosophies of education), and understanding of critical pedagogies (liberatory, culturally responsive, socially just pedagogies) used in schools across the U.S. I also promoted a pedagogy that facilitated interdisciplinary learning, where students developed an "integrated code" so that they could recognize connections between fields of learning, such as history, politics, geography, music, science, and the deconstruction of binaries that could be facilitated by developing imagination and sensibilities that demonstrated reflective openness to other cultures. Or as Coopan (2004) argues, to use literature as a way to provide students with "a way [for you] to learn to think, a mode in which you [they] learn to read..." (p. 30).

### **An Analysis of Critical, Creative, and Global Thinking**

It is important to note here, that although I have been referring to the stages of learning as linear and discreet, through my data analysis, it was clear that the stages often overlapped with one another and did not necessarily move from one to the other so cleanly. As Jason, Cynthia, and Peter learned new concepts and began to alter their ways of thinking, they often began to demonstrate characteristics of the next stage of learning simultaneously. For instance, as Jason learned about Americanization and the factory model of schooling in stage one 'transformation of information' he immediately began to ask questions about what structures at Parnell mimicked a factory model type of schooling, which was characteristic of the second stage, 'decision making'. As Jason, Cynthia and Peter entered the third stage of adopting a more critical discourse around

21st century education, they were asked to analyze the EEF Matrix by deconstructing each of the five large categories: Critical, Creative, Collaboration, Communication, and Global Thinking. They entered the exercise with some prior knowledge of the first four categories. As for the fifth category, many teachers across the district, including Jason, Cynthia, and Peter did not feel as confident in explaining or giving examples of Global Thinking. As they began to analyze each of the five categories, they began with brief descriptions of the skills and application of those skills they thought each category emphasized.

When Jason, Cynthia, and Peter were interviewed, answers and definitions for the first four categories were consistent, while definitions for the fifth category varied. I have embedded their definitions at the beginning of each section in the next portion of this chapter. As definitions and language were cultivated to describe each of the five categories, facilitators used these discussions as opportunities to discuss elements that were missing from teachers' initial descriptions of how they understood and defined global awareness and various EEF Matrix capacities. By highlighting these, sometimes small and other times drastic, differences in understanding, teachers were challenged to push their thinking to be more critical and focus more globally. These discussions in concert with the 'mini-literature review' handouts laid the foundation for Critical 21st Century Discourse to emerge.

Early on in the PD initiative, Jason, Cynthia, and Peter provided their interpretations and definitions of each of the five EEF Matrix categories. I have limited this section to highlight only three categories: Critical Thinking, Creative/Collaboration, and Global Thinking. In each examination, when possible, one cumulative answer that most closely represented all three teachers' initial understandings of each of the three categories is provided. Following the definitions of each category, I introduce the activities I used to support their learning in areas where they seemed unsure or under informed about the capacities.

## An Analysis of Critical Thinking

You know synthesizing, analyzing, interpreting. Basically Bloom's Taxonomy. They think critically when they have to take multiple sources of information, understand them, and make a coherent argument that connects them in some meaningful way. I mean they have to research and analyze, and find information. They have to interpret too. If they don't understand what they're reading well then they aren't or can't be thinking too critically. Critical thinking really draws on students abilities to construct a well supported argument. Instead of just memorizing and repeating and regurgitating, thinking critically is, um, you know, evaluating, making comparisons for the sake of value and making justified decisions, taking stances, etc. So all those things at the top of that hierarchy (Interview, Cynthia, 2011).

All three teachers referred to Bloom's (1945) taxonomy of cognitive objectives and the hierarchical nature of critical thinking skills. In Bloom's taxonomy (figure 30), lower order thinking skills—knowledge, comprehension, and analysis—are found at the bottom of the pyramid, while higher order thinking skills—analysis, synthesis, and evaluation—are at the top. It was not surprising that all three teachers used Bloom's taxonomy as *the* example to define critical thinking. Although Benjamin Bloom created the first taxonomy of educational objectives in 1956, the unmistakable and multi-colored pyramid of cognitive outcomes was widespread across the field of education in the early 1980s. Schools across the nation adopted the taxonomy and implemented these skills into curricula and daily teaching practices. Since then, various frameworks of critical thinking have pervaded educational discourse, attempting to achieve similar success to that of Bloom's taxonomy.

The three teachers knew they were supposed to teach these skills so students could learn these multiple ways of thinking. They knew students should be able to apply these very same thinking strategies to other situations outside the classroom in their daily lives. They knew they were supposed to prepare students to be able to do this. Peter most adamantly responded, "we teach our students how to do this day in and day out, I mean this is nothing new", while Jason nodded in agreement. Cynthia shared the same

sentiment and stated, “Our kids can do this, I’m not saying they’re all good at doing it, but they know what it is they’re supposed to do”. In response, I asked, “how good are your students at teasing out the assumptions that affect their individual interpretations of texts and scenarios you provide them?”. Jason asked me to clarify what I meant. I responded,

I guess what I’m asking is, how are your students at acknowledging the different ways they read texts based on the beliefs and ideologies that make them who they are, or based on the assumptions texts make when representing stereotypes, archetypes and prejudices? Are they able to find them, discuss them, and understand how they impact them as readers?

Jason answered, “Well I guess I never really thought of that before” and chuckled, while Cynthia remained quiet and Peter said,

Well, if you’re asking us, and tell me if I’m misunderstanding what you’re trying to say, if our kids know that there are stereotypes depicted in texts or that they themselves have beliefs that cause them to stereotype and judge others that stem from how they were brought up or what conversation impacted them as they sat around the dinner table, I guess the answer is they’re not very good at that at all. I mean most adults aren’t very good at that. You have to be pretty insightful to figure out why and how you know who you are. Right Cynthia?

Peter chuckled and sat back, fairly proud of his interpretation of my question. And so he should have been because he understood exactly what I was asking. And the answer was students and teachers alike were not so great at teasing out underlying assumptions.

As discussions progressed, I encouraged Jason, Cynthia and Peter to choose specific capacities on the EEF Matrix to examine closely and use in their teaching. For each large category, I urged them to choose one or two capacities they were interested in delving into deeper so they could understand the matrix intimately in order to impact their daily teaching practices. Jason, Cynthia, and Peter decided to investigate Analyzing as the category for further understanding.

- Analyzing: students will be able to deconstruct a question or problem by identifying appropriate strategies, data sources, analogous examples and underlying assumptions.

They were then asked to think about their use of world literature throughout the year. All three teachers reminded me that world literature (they used mostly American literature, two British writers, and an Australian)

mean[s] something a little different in tenth grade and that they considered world literature to be the study of literature from “multiple perspectives from different walks of life within America ... less multi-national and a little bit more multi-cultural across the sociological spectrum (Interview, Peter, 2011).

They focused on examining the different perspectives of the characters within their novels. Whether characters were rich, poor, old, or young. These were the perspectives the 10th grade English teachers drew upon when teaching "different perspectives." They offered students a one-dimensional approach to understanding what a different perspective was. (It is necessary to acknowledge the current status and situations of individuals as having direct impact on how they view their world, but it is not sufficient to rely solely on their situational knowledge to interpret and analyze the literature we read). The three teachers and I discussed how the EEF Matrix outcome for "analyzing" was asking teachers to take their analysis of characters two steps further by deconstructing and surfacing underlying assumptions that were built into texts via the various devices writers used to craft a piece of literature.

The word "assumptions" was extracted, reflected upon, and re-constructed in order to help teachers understand how assumptions found in texts or the assumptions of a reader affect how literature is read. Since all three teachers were in the midst of using the *Norton Anthology* in their classrooms, I used the text as an opportunity to begin our discussions around assumptions and what readers bring to texts. When the three teachers

were asked to elaborate on their understandings of why they use anthologies, Peter spoke on behalf of the group but Cynthia and Jason nodded in agreement.

There's no way you can fit everything into an anthology. I mean there's just too much. But what an anthology does do is put important and iconic pieces that students need to read. It's almost like a primer to World Literature. I mean they start with the oldest texts and then move on to other countries and other themes. It depends on the anthology. But I mean anthologies are good because they're a good starting point and students should know the big names first. (Interview, Peter, 2011).

When probed further, the teachers continued to explain why anthologies were helpful and sometimes inconvenient but never explored or troubled how anthologies were compiled or the choices of literature or questions they contain. At that point in time, I facilitated discussions around the following questions:

- How and what criteria are used to choose the pieces included in an anthology?
- Who chooses what is included in an anthology and why?
- What pieces were missing, if any, and why?
- Is the genre of world literature closed with firm boundaries?
- Can pieces of literature move in and out of the genre of world literature and why?

The first three questions started with an examination of the Norton Anthology itself and then a brief cross-examination between the Norton and Longman world literature anthologies and the Prentice-Hall *Masters of Literature* textbook. We looked at the following: (1) list of editors who contributed to the anthology; (2) layout of book (chronology, by country, by theme); (3) which countries were represented and which were not; (4) how many pieces were included in each countries section; (5) which pieces were chosen and which authors were represented; (6) the correlation to the state standards of teaching English; (7) other supplementary materials included in the anthology (teaching materials, teaching suggestions). By navigating through the texts with these seven questions in mind, it was not only an interesting activity for the teachers as they

explored their daily teaching resources with a different set of eyes, but also it was engaging and informative for teachers to consider and re-evaluate their priorities of what to teach and why to teach world literature. Since this was the first exercise, Jason, Cynthia and Peter decided to look at Peter's 11<sup>th</sup> grade honors world literature course and the reading list as a group and revise the readings together rather than work independently from the 10<sup>th</sup> grade syllabus. They decided to do this because Peter's humanities course offered a stronger foundation for 'world literature' than the 10<sup>th</sup> grade syllabus, that they kept reminding me, didn't really 'cover' world literature. This was an acceptable exercise in my view as it encouraged the three of them to work together and re-conceptualize a syllabus they would eventually teach. From Peter's original list, they removed three readings and inserted three other readings.



<b>Original Syllabus (excerpts only)</b>	<b>Deletions and why</b>	<b>Insertions of New Texts</b>
<i>The Power of Myth</i>		
<i>Imagine or Where Good Ideas Come From</i>		
<i>The Epic of Gilgamesh</i>		
<i>Genesis</i>	Deleted: Since there were already several 'old' texts on the syllabus, they omitted the book of Genesis.	I suggested reading <i>Reading Lolita in Tehran</i> , to open up a conversation about the natural aspiration of 'world' literature, colonialism, and the problem of reading practices that assume a straightforward 'center to periphery' line of influence.
<i>The Iliad</i>		
<i>Beowulf</i>		
<i>Oedipus Rex</i>		
<i>Metamorphoses</i>		
<i>Inferno</i>		
<i>Candide</i>		
<i>Macbeth</i>	Deleted: Since students studied Shakespeare throughout their HS careers and all knew who Shakesperae was, they felt they could omit him from the list.	Exploring the theme of 'exile, hybridity, migration and nation', I suggested they might start with excerpts from: <b>Jamaica Kincaid; Roger Mais; and Wilson Harris</b>
<b>Romantic Poetry</b>	Deleted: Cynthia explained they usually didn't get enough time to cover 'that much' poetry anyway and so it would be an opening for new readings.	I suggested they might want to explore the concept of 'world' further by imagining alternative worlds across space and time, not just the globe. Possible pieces from science fiction, dystopian novels, and utopian writing. We decided on excerpts from: <b>Utopia, Sir Thomas More; Waiting for the Barbarians, J.M. Coetzee; and The Handmaid's Tale, Margaret Atwood.</b>

Table 20. Adapted 11<sup>th</sup> Grade World Literature Syllabus

### **Transitioning to a more ‘global’ understanding of World Literature**

It was also an opportunity for teachers to reflect on their roles as teachers and what they were teaching with a more global approach. Previously the teachers mentioned the English 10 course description to be inaccurate in terms of how world literature was taught at Parnell. It was useful to bring them back to their initial definitions and explanations of why world literature was taught differently at Parnell. I asked Jason, Cynthia, and Peter to re-consider after the discussions we had on the anthologies whether English 10 should still use "world literature" as "less multi-national and a little bit more multi-cultural or global across the sociological spectrum." Jason exclaimed that the way he taught world literature would be re-invented, re-organized, and re-considered. He made a goal to re-vamp the reading list on his syllabus, ask students questions that would make them think about the ‘missing voices’ of texts, and create assignments where students would have to think about their own beliefs about their roles as students learning literature. This was recorded during a PD session then a few months afterwards, Jason was asked to present at a Board of Education meeting by Ted Scots to present to possible funders how his daily practice changed as a result of the EEF initiative. During that presentation, Jason gave a testimonial, similar to the goals he made during the PD session we had a few months prior and presented his unit on *EAARTH*.

Peter shared that he could definitely incorporate more diverse literature into his daily practice but was still certain he would only get through a fraction of the anthology, let alone reach a point where he’d run out of time and have to stop at a critical point in his teaching to be left frustrated or unsatisfied that his students actually saw his points through. Cynthia responded thoughtfully that she could definitely incorporate more diverse literature in her classroom, but she still needed to focus on making sure students could get their ideas across in an articulate and coherent manner.

For the last two questions, I facilitated a brief overview of definitions and debates about definitions of world literature. I offered a variety of sources and articles to the

teachers through a handout (see appendix A) and provided oral accounts or short quotes for teachers to draw upon in order to help them explore world literature with a more global perspective.

**World Literature and Its Moving Boundaries.** In short, based on the scholars elaborated on in the handout (see appendix A), as a group, we agreed that:

- No set canon as "world literature." The canon of world literature is malleable and always moving. It is impossible to "read widely" and read the entire canon of "world literature."
- Text is categorized as world literature when it has been deemed literature and has maneuvered beyond the boundaries of its nation via translation or circulation.
- Literature can and should be read differently in different contexts and will bring different readings/interpretations each time.

It became clear to Jason, Cynthia, and Peter that the notion of restricting world literature to a canon was impossible due to world literature's malleable and constantly moving nature. It was also clear how unrealistic the argument to "read widely" enough "to cover" the category of world literature was. Acknowledging these characteristics of world literature surfaced questions surrounding power relationships: who decides texts are world literature-worthy or not? When does text circulation become official? What texts are chosen in translation? Are local and regional texts worthy of inclusion? Jason, Cynthia and Peter left the PD sessions with lingering questions that remained unanswered. As a final activity, I asked them to find a quote, out of all the quotes we had read, that resonated with them. Peter chose the following quote:

It is clear that "national-literature model is now clearly inadequate, both because a number of languages and their literatures transcend national borders, and because the de-centering of the nation-state brought about by contemporary global capitalism alters literary circulation" (Beecroft, 2008, p. 98).

I thought that his choice was accurate and demonstrated the several discussions we had during our sessions together. In Peter's original definition of what world literature was to him, he mentioned translations of texts and briefly alluded to the circulation of texts across the world. He was the only teacher of the three to discuss translation and circulation and so, it was not surprising that the quote he chose spoke directly to knowledge he already possessed prior to the PD initiative. Peter's choice of quote also demonstrated however, that he did not necessarily move beyond what he already knew or assumed about world literature, instead the quote confirmed his prior knowledge.

Jason on the other hand chose a quote that he said 'spoke to him' by telling him he had to teach 'more globally'.

world literature should be "read globally" because "reading globally thus trains our attention on something other than the inevitable lists that litter the battlefields of world literature courses (Coopan, 2004, p.12).

Jason interpreted Cooppan's quote as telling him it wasn't about reading the texts in the anthology or reading as many books from as many countries and authors as possible to be 'well read'. Instead, Jason now believed he, and his students, needed to 'read between the lines'. "I have to teach my students how to read the fine print. They have to look closely and ask questions so they are reading critically. I don't think they'd know even a fraction of the information we talked about anthologies. I mean, they've got a lot to think about" Jason replied. He was intent on teaching his students how to 'read critically' and 'read globally' so his students didn't "just read a book and forget they read it and not remember what they just read."

Cynthia chose a quote from the first handout I offered quotes from. She chose a quote that discussed the different ways texts could be read based on the differing perspectives that a text embodied, a reader brought to a text, or the impact the situation in which the text is being read can have on the reader.

It is important from the outset to realize that just as there never has been a single set canon of world literature, so too no single way of reading can be appropriate to all texts, or even to any one text at all times (Damrosch, 2003, p.5).

I thought this quote was a comfortable choice for Cynthia. When she shared her definition of world literature and explained what skills would be needed in order think globally, Cynthia almost always gave the same answer. “You have to have different perspectives” or “see from other people’s perspectives” or “understand there are different perspectives to every situation”. It was most important to Cynthia she as a teacher, and her students think about what other people were feeling and thinking. When I asked Cynthia to explain why she chose this particular quote she answered,

I chose this quote because I thought it was true when it said, ‘no single way of reading’. I mean if a child in Africa read *Lord of the Flies* and my 10<sup>th</sup> graders are reading *Lord of the Flies*, it’s going to be two totally different ways of interpreting the story. I mean the kid in Africa is in a totally different situation. So I mean, I guess you could say in this case, anything or any piece of literature could be world literature because it totally just depends on the person who is reading it and the perspectives they bring to it. (Interview, Cynthia, 2011)

Cynthia’s response indicated to me that she was making connections to what she was already familiar with, different perspectives. She also demonstrated an understanding of what it meant to bring a different perspective to a text depending where a reader is situated and how it impacts their reading of a text. However, Cynthia did not demonstrate any new ways of applying what we discussed in our PD sessions to her daily practice. She always knew and taught students the importance of reading and understanding

different perspectives. She did indicate one new way of conceiving world literature and that was that “anything or any piece of literature could be world literature because it totally just depends on the person who is reading it and the perspectives they bring to it”. She had moved beyond thinking of a set canon as world literature.

Jason, Cynthia and Peter’s responses indicated to me that they all chose quotes that made sense to them based on their prior knowledge and was meaningful to their practice in some way. For Peter, he seemed to choose a quote that was most unrelated to the daily practice of the English 10 readers since they did not read works in translation or discuss topics of circulation. However, his quote did reinforce his prior knowledge of what world literature was to him and what he had learned about world literature in the past (perhaps through his undergraduate studies or during his experience as a book editor).

Unlike Peter, Jason’s response and quote selection did not reinforce a concept Jason was already familiar with, instead, he chose a quote that taught him something new and applied directly to his daily teaching practice. His quote told him to teach students how to read globally and that was what he intended to do. He learned something from the process of choosing the quote that would directly impact him as a teacher and his understanding of world literature also shifted as he no longer viewed world literature as a set canon. His comment at the beginning of our work together, “we read those pieces [in the anthology] because they’re the most important ones, that’s why they’re in there [the anthology] and that’s why we’re supposed to know them”, no longer held true. He thought otherwise and wanted to use more texts from various sources to demonstrate to students that there was more than the set canon of ‘what you read in school’.

**Aha Moments.** The excerpts teachers were given of readings and quotes from various scholars on world literature guided their discussions on the porous nature of world literature and the assumptions they brought to the genre of world literature prior to discussing various arguments. By the end of the first semester, Jason and Cynthia shared similar opinions,

I get it. It's the who's missing piece. Who makes the decision to include something or not? Who got to put this into the anthology and why? What makes this a classic and this not? (Interview, Jason, 2011)  
It's troubling what's fed to us – questioning deeper – like spies (Interview, Cynthia, 2011)

It was almost as if Jason and Cynthia experienced sudden moments of awakening. They listened during discussions and asked clarifying questions but didn't demonstrate their attempts to grapple with the questions during the large group discussions. I assumed and hoped that when they left each session, they grappled with new ideas, independently attempting to formulate understanding. Peter, on the other hand, was very verbal during both large and small group discussions, professing his disagreements at times and asking for clarification immediately when something was unclear. He analyzed the texts and quotes intensely and grappled with issues during discussions. By the end of the semester, he had demonstrated gradual change from session to session, unlike Jason and Cynthia, who had "epiphanies" toward the end of the semester. However, Jason, Cynthia, and Peter did not discuss the concept of boundaries further until we began to discuss global thinking and what it means to be a global citizen.

### **An Analysis of Global Thinking**

When the three teachers arrived at the global thinking category, definitions varied. Jason responded:

This is knowing you're not alone in the world. That there's more than just you. I think it's understanding different cultures, taking on different perspectives and thinking about your role in the big picture.

While Cynthia responded:

I mean this is really taking on different perspectives and really showing empathy. Reading something and knowing how it relates to you even though it's happening to someone else. You know knowing that what happens to the characters can really happen to you.

Lastly, Peter responded:

This is really considering the state of the world and that it's in. All of the tragic, devastating, or maybe exciting and innovative things that happen around the world. This is being educated in a worldly sense. Knowing what's going on in Asia even though you live in North America. Knowing the history behind things. I mean I would love it if my kids could realize that pop stars today did not create half of the things they sang and that they all do really, really bad covers of iconic songs. It's understanding your place in the world.

All three teachers provided possible definitions of what they thought global thinking encompassed, but never attempted to explain beyond their tentative definitions.

What I noticed from their definitions was that they did not consider the implications or consequences that occurred after one engaged in thinking globally, nor did they move beyond the understanding that global thinking required multiple perspectives. They were able to clearly articulate what skills they thought students and teachers needed in order to engage in global thinking (taking on different perspectives, to empathize, understanding your role in the world, relating to someone else) but did not consider the impact those skills might have in the long run on oneself, others, and the world. The absence of acknowledging potential implications provided a platform for me to begin discussions around the additional skills and dispositions students and teachers need in order to engage in meaningful global thinking. To begin our exploration, I distributed another handout that discussed, briefly, global education and the arguments of Martha Nussbaum, a professor at the University of Chicago (please see Appendix B, F & G). In short, Global Education was defined as:

An investigation of common human problems that transcend national boundaries (Frey & Whitehead, 2009), an exploration of the significance of



world, as opposed to national citizenship involving ethical obligations to humanity (Avril, Hinderliter, & Stavroula, 2009), critical evaluation of governments and economic systems impacting the world (Davis, 2006), the acquisition of cultural capital that encompass possessing the ability to access, interpret and critique another culture through acquiring that culture's language as well as knowledge of its cultural texts (Guillory, 1993; Spivak, 2003), and the application of linguistic capital involving the ability to critically interpret all forms of texts that transcend culture including multimodal texts (Scholes, 1998; Kress & Jewitt, 2003 as cited in Choo et al., 2010)

Nussbaum (2003) is arguing for an education that emphasized the humanity needed to cultivate a world that is interconnected through a deconstruction of binaries facilitated by developing imagination and dispositions that demonstrated reflective openness to other cultures within students. I challenged teachers to think what capacities students and teachers alike would need in order to engage in the type of education Nussbaum described. Cynthia said, "like I said, you have to be able to see from other perspectives." Jason replied, "I mean you have to realize you're not the only one in the world." Peter responded, "are you asking us to figure out the specific skills?" Using Peter's question as a segue way for teachers to create a list of specific skills they could cultivate in order to 'see from other perspectives', or to 'realize you're not the only one in the world', we created a list together. I hoped this list would help teachers across the district, not just Jason, Cynthia and Peter, to concretize exactly 'how' one could teach students to think globally. Many teachers were unclear exactly 'how' or 'what' skills they needed to teach to help cultivate global thinkers, and the list Jason, Cynthia, and Peter created would be a good example of skills teachers could explicitly teach in classrooms on a daily basis:


### Skills for Global Thinking

- To think critically
- To consider different points of view
- To question
- To reflect
- To Work collaboratively
- To create original ideas

*Figure 27. A list of skills to teach to cultivate global thinking*

The list Jason, Cynthia, and Peter created was relatively short and included skills that were necessary not only to engage in thinking globally but in thinking in general. To refine their list further and to guide them towards a more specific set of skills they could explicitly teach to cultivate global thinking, I had them elaborate deeper on what types of different points of view needed to be critically examined to potentially achieve a global view of an issue. The teachers and I brainstormed an additional list of different points of view and came up with the following.

### Skills for Global Thinking

- |  |   |   |
|--|---|---|
| <ul style="list-style-type: none"><li>-<u>To think critically</u></li><li>-<u>To consider different points of view</u></li><li>-To question</li><li>-To reflect</li><li>-To Work collaboratively</li><li>-To create original ideas</li></ul> |  | <ul style="list-style-type: none"><li>- Ethical, economic implications</li><li>- Scientific applications</li><li>- Political reasons/consequences</li><li>- Sensitivity to others</li><li>- Ability to perceive differences</li></ul> |
|--|---|---|

*Figure 28. A revised list of skills to teach to cultivate global thinking*

From their revised list, we discussed the ethical capacities needed in order to engage with everyday global issues like business, famine, terrorism, and human rights and the perceptual thinking required not only to read different perspectives,

but to critically interpret and reflect on multiple voices “to venture beyond narrow group loyalties and to consider the reality of distant lives” (Nussbaum, 2003, p. 10).

Cynthia responded,

So when we ask our students to take on multiple perspectives we want them to looking at all the identities found in a piece of text. Not only the authors identities, but the political, economic and cultural identities and histories. Basically everything that surrounds a book when it is written or translated or sold in other parts of the world. And you want us to ask students to question the agency and intent of literature. Okay, that’s a lot. I don’t know. They would really have to know a lot in order to do this.

Cynthia acknowledged what the EEF PD initiative was asking her to do was to integrate more ethical and perceptual thinking into her daily practice, but she was sceptical whether students would truly be able to demonstrate a global way of thinking. She continuously referred to the lack of time and the level of difficulty in thinking globally for her tenth graders. At the end of our many discussions, Cynthia left unsure and tentative about whether or not she was willing to spend time on concepts such as ethics if her students found it too abstract to retain. She was unable to visualize successfully moving her students toward this mode of thinking. She was unsure if she would be able to complete all of her other responsibilities as a teacher if she started to teach global thinking, and most of all, she was worried what the parent response would be when students went home and told their parents they were working a lot on global thinking but they weren’t receiving grades for their "work" (thinking).

I thought Cynthia left our discussions without altering her daily practice because of her tentativeness and scepticism. However, in a following unit, Cynthia created an assessment for her English 10 students that engaged them in global thinking. In the past, Cynthia had asked students to engage in “close reading, character analysis, studying a novel, allegory, annotation, writing practice” to begin the *Lord of the Flies* unit. After considering how to infuse more global ways of thinking into her unit, she decided to start

her unit with an assignment that would encourage students to begin thinking differently. She still wanted to focus on “power, how it’s gained, controlled, political allegory, societal and religious allegory” found throughout *Lord of the Flies*, but she wanted her students to draw on "multiple perspectives" and demonstrate how they could "synthesize and apply" different types of knowledge. The assignment she created asked students to: read five articles (chosen by the teacher from various sources); draw on prior knowledge of books read from 6th grade to present, including the *Lord of the Flies*, and create an argument or critique that connected the various pieces together. She anticipated that her students would probably give her a “knee jerk reaction and hand in a half formed opinion based on what they heard but wo[uld]n’t be able to support their argument” when they handed in their assignments.

However, I encouraged her that it didn’t matter what she would receive the first time she attempted to change her practice. I reminded her that it would take students time to adjust to different ways of thinking, to understand the ways of thinking that were being encouraged. I also reminded her that it would take her time to figure out what she now expected of students and how she planned on providing them opportunities to demonstrate what she expected. Thus, I prompted her to create a rubric that would allow not only her students, but also her, to see exactly how they were engaging in global thinking (see Figure X). As Cynthia planned and implemented this unit, Peter worked with her to also embed new assignments and rubrics into his daily teaching. Since they shared planning times, they worked as a pair to re-vamp their existing *Lord of the Flies* unit. *Table 20* is an example of the rubric Cynthia created to assess her students in global thinking: perspectivizing. Any more here to emphasize that Peter was working with but maybe a bit differently....

Jason immediately wanted to integrate more global thinking into his practice and did not wait to do so. He thought it would be a great idea to change the topics provided for students in the sophomore research paper, since his students were about to begin the

project in a couple of weeks. He also thought it was important to integrate global thinking into the sophomore research paper since it was a mandatory graduation requirement. The SRP required students to research a topic, from a teacher generated list, to act as foundation for a student-generated, original, and innovative short story.

Jason shared his ideas to explicitly teach global thinking throughout the year by providing students with opportunities to draw on ethical and perceptual capacities when examining literature in hopes that they would transfer these experiences to the culminating sophomore research project topics. Jason shared that many students often researched topics (see Table 22) and returned with interesting facts and information, but did not delve into tenuous social issues that lay in the history of many of the topics. Jason envisioned explicitly guiding students to consider the ethical, political, cultural, and scientific implications of topics, as shown in Table 23.

Table 21. Lord of the Flies Rubric: Cynthia Application of Global Thinking

HS ENGLISH PRE/POIST Test Rubric	Limited  Unsupported, incorrect analysis, misconceptions	Emerging  Narrow, indirect use of references, superficial, unclear	Present  Reference to resources, reasonably clear, takes a position	Complex  Supported, clear, multiple references and perspectives
<b>Synthesize and Apply</b>  (original) Students will be able to demonstrate flexibility in <i>integrating</i> and <i>applying</i> personal, collective and generated knowledge to a novel application.	Students demonstrate application of <u>one of the following types of knowledge: personal (opinion), collective (learned/researched) and generated (new idea based on 2 previous)</u> , to provide an <u>unsupported rationale and/or solution</u> to the NYTimes sites provided.	Students demonstrate an <u>attempt at <i>integrating</i> and <i>applying</i> at least two of the following types of knowledge: personal (opinion), collective (learned/researched) and generated (new idea based on 2 previous)</u> , to provide a <u>plausible rationale</u> the NYTimes sites provided.	Students demonstrate an <u>attempt at <i>integrating</i> and <i>applying</i> all three of the following types of knowledge: personal (opinion), collective (learned/researched) and generated (new idea based on 2 previous)</u> , to provide a <u>supported rationale and/or solution</u> to the NYTimes sites provided. Student draws on a <u>obvious information</u> to support their conclusion.	Students demonstrate <u>flexibility in <i>integrating</i> and <i>applying</i> all three of the following types of knowledge: personal (opinion), collective (learned/researched) and generated (new idea based on 2 previous)</u> , to provide a <u>complex rationale</u> in response to the NYTimes sites provided Student draws on a balance of <u>obvious and non-obvious information</u> to <u>support their conclusion</u> in a <u>sequential articulation</u> .
<b>Perspectivizing</b>  (Original) Students will be able to engage in an original empathetic response informed through examining an issue from multiple perspectives (e.g. alternate theories, possibilities, other absent sources).	Student demonstrates a <b>personal</b> response by examining an issue from one perspective. Student showcases his/her own perspective on a given issue.	Student demonstrates a <b>supported</b> response by examining an issue from two obvious opposing perspectives. Student explicitly showcases <b>one</b> perspective on a given issue.	Student demonstrates an <b>informed</b> response by examining an issue from multiple perspectives (e.g. alternate theories, possibilities, other absent sources). Student explicitly showcases <b>two</b> perspectives on a given issue.	Student demonstrates a <b>complex and informed</b> response by examining an issue from multiple perspectives (e.g. alternate theories, possibilities, other absent sources). Student explicitly showcases <b>more than two</b> perspectives on a given issue.

Table 22. Possible Topics for the Sophomore Research Paper

<i>(If you wish to research something that is not listed below, confer with your teacher.)</i>		
<u>Automobiles</u>	<u>Eras</u>	<u>Professions</u>
American	General (Renaissance, Puritan, etc.)	(specific)
Foreign	Specific timeframes	<u>Psychology</u>
Exceptional	<u>Events</u>	Study
<u>Crimes</u>	Natural Disasters	Dysfunctions
Bizarre	Wars	<u>Science Fiction</u>
Reality based	<u>Locales</u>	Robotics
Mysterious	Exotic	Artificial Intelligence
Forensics	Familiar	Space Exploration
<u>Diseases</u>	<u>People</u>	<u>Sports</u>
Pandemics/epidemics	Famous	Professional
Chronic	Historical	Collegiate
		Basic elements

Table 23. Jason's Newly Proposed Topics for the Sophomore Research Paper

<i>(If you wish to research something that is not listed below, confer with your teacher.)</i>		
<u>Automobiles</u>	<u>Eras</u>	<u>Professions</u>
American	General (Renaissance, Puritan, etc.)	(specific)
Foreign	Specific timeframes	<u>Psychology</u>
Exceptional	<u>Events</u>	Study
<u>Crimes</u>	Natural Disasters	Dysfunctions
Bizarre	Wars	<u>Science Fiction</u>
Reality based	<b>Ethical decisions made during wartime</b>	Robotics
Mysterious	<u>Locales</u>	Artificial Intelligence
Forensics	Exotic	Space Exploration
<u>Diseases</u>	Familiar	<b>Ethical implications of Artificial Intelligence</b>
Pandemics/epidemics	<u>People</u>	<u>Sports</u>
Chronic	Famous	Professional
<b>Distribution of vaccines</b>	Historical	Collegiate
		Basic elements

Jason was energized at the possibilities of what his students might produce, just how far they would be able to extend or reconsider their beliefs, and just how far he would be able to guide them as their teacher. He tried new approaches and adapted many existing lessons after the discussion on Global Thinking. He also met with his CIL on a regular basis to reflect on how his lessons were improving, remaining the same, or in need of improvement. He used the feedback from the one-on-one meetings with his CIL to go back and re-consider upcoming lessons in a unit.

Unlike Jason and Cynthia, Peter brought with him prior knowledge of what it means to draw on ethical and perceptual capacities when engaging with literature. He truly believed he enforced global thinking in his daily practices when he asked students to think about the impact of the decisions they made, whether they impacted them, their immediate community, or someone else in a distant country.

But I mean, our kids already do this. Don't you think? I mean they have to think about how this impacts other people in their world. I tell them everyday that they're not the only ones living on this planet. I mean the greater question of ethics is interwoven throughout what I teach everyday.

Peter demonstrated an understanding of what encompassed Global Thinking but did not challenge himself further by considering "what else" he could do as a teacher to promote ethical and perceptual capacities in his students. He wasn't resistant to adopting new ways of thinking. He was unmotivated in a sense to try "something new" that he considered "something old." His prior knowledge confirmed that he already knew everything he needed to about Global Thinking and impeded him from pushing himself further. In the end, Peter worked with Cynthia on their upcoming *Lord of the Flies* unit and integrated what they created together into his daily instruction. I hoped that Peter would have engaged in "suspending judgment" and "tolerated ambiguity" during the discussions on Global Thinking in order to encourage himself to think of new ways of contextualizing and examining his existing knowledge base. However, based on my analysis of classroom documents and lessons after our discussions on global thinking, he did not alter the way he taught literature.

### **An Analysis of Creative Thinking**

Creative thinking to me is thinking outside of the box. You know thinking of something new. Creating a new product. Making something original.  
(Interview, Peter, 2011)

In English it's like Creative Writing. Students can write whatever about whatever they want but I get them to read the classics, the important authors.



The people who are exemplars so they can model, no not really model, but you know get a sense of what creativity is really about. They can write about anything that they're interested about and have fun with genres and forms. I mean, it's so hard to critique something, well I mean at this level, the high school level, that hasn't already been critiqued already. By big names for that matter. Anyway, so I teach my students how to take literature and find other sources and find themes that connect the pieces together so they can create a new and original argument. Something that is original because it's different sources you know. I mean they have to be able to effectively problem solve by originating, altering or elaborating upon ideas. (Interview, Cynthia, 2011)

Well I think creative thinking is making extensions upon what you already know, that you've got this base of knowledge right here. Well what can you do with it to create something new? I don't think anything new has really been created in a long time in human history, but when we ask our students to think creatively we're asking them to take the information that they already have at hand, maybe that we've taught them or that they've gathered, and to put it together in a unique way. (Interview, Jason, 2011)

When asked to define creative thinking, all three teachers elusively explained that students needed to "think outside the box."

Jason, Cynthia, and Peter tried their best to relate it back to the classroom by providing examples of how students utilized literature as a basis to alter or elaborate on already existing ideas but did not provide many more examples beyond that. They used examples of students' predictions of what would happen next in a text as a way of being creative. They asked students to create alternate endings to existing literature to demonstrate creativity. Jason believed the sophomore research paper was a "creative" project that measured students' creative and critical thinking abilities. Peter repeatedly reminded me that they were already engaging students to think creatively in their classrooms on a daily basis.

I agreed that they engaged their students in creative thinking through some of the activities and assignments throughout the year but pushed them to consider more definitions of creativity. Jason, Cynthia, and Peter seemed to be equating creativity with

the "products" students would essentially produce by way of being creative. Whether it was an original thought, a new story, or a new board game, creativity seemed to be measured by the production of an item or concept. I wanted to introduce the idea that creativity could also be considered in terms of the "opportunities" students engaged in that teachers provided in their classrooms so students could enact creative propensities.

Teachers were unsure what I meant so I offered an analogy:

If you give your students (10<sup>th</sup> grade, that means they've been in school for 11+ years) a blank piece of paper and tell them that they are being assessed on they're ability to be creative without any further instruction, I'm sure your students will ask you, 'do you want us to write something? Do you want us to draw something? How long does it have to be? How many marks is this out of? Is this going on our report card? And your students would be stressed out at the prospect that you've left them to their own devices to figure out on their own what it is that 'you' want. Our students are so used to pleasing us, as teachers, and satisfying the requirements of 'school' that they're left without a thought in their minds when we say to them, 'it's up to you'. With that being said, we can't just expect them to know what to do. If we model for them different ways to utilize that 'blank piece of paper' a few times, and then create an environment that is safe, inviting, and high stakes in a way where they are not being threatened by grades, but still being held accountable for what they are producing, our students will be more open to taking risks, tolerating the grey spaces, and suspending judgment. They won't have to look for the 'right' answer.

I wanted teachers to consider the non-cognitive skills that provide students opportunities to engage in creative thinking, skills that asked students to "tolerate ambiguity and take risks," "imagine possibilities," or "suspend judgment." It was these skills that I challenged teachers to think about in order to re-consider their beliefs about creativity through an examination of their sophomore research assignment.

These teachers were asked to point out where they thought they saw students being asked to "imagine," "tolerate ambiguity," or "suspend judgment" in the assignment. I intentionally chose to use an existing assessment Jason, Cynthia, and Peter were familiar with for the exploration exercise. I hoped they would be able to take a familiar

assignment and view it with different lenses. I hoped that the act of viewing something in various ways would help teachers reflect where they could adapt their existing teaching practices and assignments. I also hoped that they might experience moments that confirmed what they were already doing was either meeting expectations or falling short of the expectations of a 21st century education. I led them to navigate their own explorations so I was not an external party evaluating their work. They evaluated their own work through reflection and discussion with one another.

### **Composing a Short Story: The English 10 Sophomore Research Paper**

For the sophomore research paper, students were asked to research a topic (from a list provided by the teacher) and then compose an original short story (see Figure 28) that utilized the research collected.

(2) **The Short Story.** You will then produce a short story (four pages minimum, twelve pages maximum, typed and double-spaced) in which you incorporate elements of your researched topic. The details of your topic need not be central to the plot of your story, but should have a significant influence on its events/characters. *Your teacher will provide you with examples of published short stories that incorporate “real world” research.*

*Figure 29. Sophomore Research Paper Task Outline: Compose a Short Story*

It was considered a creative project and assessed using a detailed rubric (see Appendix I). Completion and passing the sophomore research paper also satisfied a mandatory graduation requirement. The second task in the research project provided students with opportunities to imagine possibilities and explore areas of interest but required that they check with the teacher before pursuing any areas of research that were not on the assigned list of topics. Students were provided with choice, but with conditions that kept them within the parameters of what teachers deemed acceptable and not acceptable.

The teachers agreed that the task of creating a short story that incorporated research required imagination to create an interesting plot, series of characters, and accurate

representations of topics based on their research. The three emphasized that this was an opportunity for students to engage in tolerating ambiguity when they were in the planning phases of their short story. They described the "unknown" or not-yet-written portions of students' short stories as the ambiguous moments writers experience until an idea emerges and propels them to compose more. The teachers also equated the risk-taking involved as students composed their short stories knowing their graduation depended on a successfully completed sophomore research paper. They explained that students wouldn't be willing to "mess it up" because it was such a high-stakes assignment. However, they could not pinpoint what it meant to suspend judgment, duly noting that what was attainable was a contradictory hybrid, a type of "structured creativity."

What surfaced from the discussions was a confirmation that the teachers understood students needed to know how to tolerate ambiguity and take risks, but they could not conceptualize how they would measure (assess) those skills in the classroom. The subjectivity and intangibility of the skills made it difficult for the teachers to consider these non-cognitive skills important. It also made it difficult for them to devote time to explicitly teaching skills that they did not know how to measure concretely. I brought them back to the EEF Matrix to examine the three capacities that they believed emphasized creative thinking skills needed in the 21st century:

- **Imagining:** Students will be able to imagine new directions/approaches (including alternate, divergent, and contradictory ideas) to solve a real-world problem.
- **Risk Taking and Tolerating Ambiguity:** Students will be able to negotiate problems when no obvious choice exists among a wide range of possibilities; this opens space for adaptations, further explorations, and risk taking.
- **Suspending Judgment:** Students will be able to suspend judgment to a high degree in order to grapple through complex issues.

The questions these teachers posed about these three capacities offered an opportunity for me to provide the teachers with examples of frameworks focused on creative thinking that provided different ways they could set up learning opportunities for students to creatively engage with knowledge.

- How do you measure how much risk a student is taking?
- How can you see a student taking a risk?
- How do you know when a student is tolerating ambiguity?
- How do you teach students to suspend judgment?
- What does it even mean to suspend judgment?

After aggregating examples through another ‘mini-literature review’, I grouped various frameworks, models and theorists on creativity or creative thinking into four areas of focus: the interrelationship between critical and creative thinking through process models; causal factors of creativity; creative products; and creative abilities/skills (see Appendix C).

### **Examples of Models of Creativity**

As words were interchangeably used across multiple 21st century frameworks to define creativity and/or 21st century skills, it was normal to hear the following statements from administrators, teachers from all around the district, and Jason, Cynthia, and Peter alike: “You have to be adaptable and agile in order to be creative”; “Creativity means you’re innovative and original”; “You have to be innovative in the 21st century”; “I think adaptability is definitely a 21st century skill.”

It was clear that Jason, Peter and Cynthia were also interchanging words to describe creativity and 21st century. This blending of the two is typical in much of the literature they might have or were reading. Twenty-first century frameworks had synthesized the literature on creative thinking and/or creativity and re-labeled, re-worded,

and re-invented new terms to include on their frameworks as 21st century skills, so it was only a matter of time that words that were reserved to define creativity were now also being used to define 21st century skills. Thus, it was not only necessary, but interesting to provide an overview of the different ways creativity was represented across the literature.

**Process Models.** We had read a popular white paper written by a team at MIT on Media Literacy (Jenkins, 2006) that caused a tidal wave of looking at 21st century skills through a digital technology lens early on in our work together. Using that white paper as a starting point, I provided Jason, Cynthia, and Peter with other lists that outlined what types of skills were needed in order to cultivate creativity and creative thinking. One of those lists was Csikszentmihalyi's (1996) list of eleven skills that encompassed both creative and critical propensities. Csikszentmihalyi's list included the following skills:

Idea generation, curiosity, imagination, reasoning by metaphor and analogy, elaboration, complexity, synthesis and combination, abstraction and simplification, tolerance for ambiguity, divergent thinking, fluency, flexibility, concentration, persistence, entrepreneurship, intrinsic motivation, risk taking, projection, empathy, originality, storytelling, flow. (p.49)

In Jenkins' (2006) white paper, he made it clear that people would need to have a good grasp of all ten of the media skills included in his list in order to be fully participatory in the 21<sup>st</sup> Century whereas Csikszentmihalyi's (1996) list was broader in the way that he expected people to be strong in some skills and weaker in others. He didn't expect anyone to be strong in all of these skills, but rather, to acknowledge a variety of skills. When discussed with Jason, Cynthia, and Peter, I drew on Sternberg's (1999) argument that weaker skills would often be counterbalanced by stronger skills, creating balanced creativity within individuals. Cynthia seemed to be relieved in this notion and was grateful they (her and her colleagues) didn't have to 'teach all of these skills'. However, I stressed the danger of gravitating to teaching the same skills repeatedly due to comfort. It was important for teachers to acknowledge the possibility of avoiding to teach some skills because they seemed 'hard, difficult, or too much effort'. It was important that

teachers tried to teach a variety of skills so that their students had multiple opportunities and a variety of experiences to engage in creative thinking and creativity in a meaningful way. Re-teaching skills was certainly needed when teachers were becoming familiar with skills and practicing or trying out new practices, or when teachers needed to teach particular skills in line with certain curricula, but it was important teachers reflected and challenged themselves consistently by talking with their colleagues and administrators on how to continuously improve their craft. After discussing lists of skills that promoted creative thinking, we examined Puccio, Murdock, and Mance's (2005) model that displayed the interrelationship between cognitive and affective (creative) thinking behaviors and characteristics when engaging in cognitive and affective skills. What teachers noted immediately was that the skills that they would've considered 'creative' were considered the affective or 'soft' skills, while the 'harder' skills were the cognitive skills. Puccio et al. note that openness to novelty, tolerance for ambiguity, and tolerance for complexity underlie all stages of creative problem solving. Our examination of Puccio et al (2005) opened up discussion on teachers' accountability to grades for cognitive skills, and the ambiguity of whether or not they needed to provide grades for affective skills and how they would go about evaluating something as subjective as 'playfulness'. This was a natural segue to introduce teachers to alternate ways of thinking about grades and their importance as well as the difference between providing students opportunities to cultivate skills and evaluating skills to provide a grade.

<b>Steps</b>							
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
	Assessing Situation	Exploring a Vision	Formulating Challenges	Exploring Ideas	Formulating Solutions	Exploring Acceptance	Formulating a Plan
<b>Cognitive Skills</b>							
	Diagnostic	Visionary	Strategic	Ideational	Evaluative	Contextual	Tactical
<b>Affective Skills</b>							
	Curiosity	Dreaming	Sensing Gaps	Playfulness	Avoiding Premature Closure	Sensitivity to Environment	Tolerance for Risks

*Figure 30. Representation of Cognitive and Affective Interrelationship*

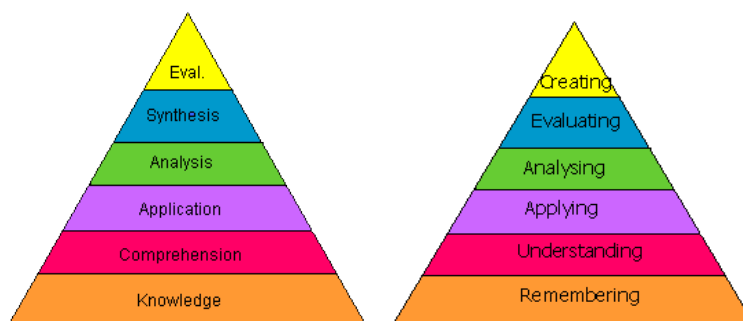
The hierarchical format of Puccio et al's (2005) model led us to a comparison of Bloom's (1945) original taxonomy to Anderson & Krathwohl's (2001) adapted version.

This was an important model to examine because Jason, Peter, and Cynthia had all referred to Bloom when discussing their thoughts on critical thinking and to observe that the highest level of attainment on the adapted Bloom's taxonomy was now the skill 'creating' implicitly demonstrated to all three teachers that creativity had somehow become superior to critical thinking on their tried and true, trusted, Blooms' Taxonomy. By eliminating 'synthesis' and inserting 'creating' Anderson & Krathwohl (2001) made Bloom's original taxonomy slightly more ambiguous and open to interpretation. These teachers now had to determine what it meant to 'create' or innovate a new and original concept or product. The subjectiveness of the word 'creating' prompted teachers to discuss what it really meant to provide opportunities to 'create' at a high and rigorous level, making sure not to turn those opportunities in 'arts and craft'<sup>2</sup> experiences for students.

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<sup>2</sup> Often the three teachers would refer to 'creating' as the 'arts and crafts'. The act of creating to the three teachers was considered not rigorous and required lower order thinking skills. They equated creation to 'coloring', 'making a game', 'creating a product' and shared that they didn't believe that was the only way students could be creative, but was often how teachers, they included interpreted what it mean to engage their students in creative work.





*Figure 31. Bloom's Taxonomy and Anderson and Krathwohl's Adaptation of Bloom's Taxonomy (2001)*

Following our review of the process models discussed above, I provided a handout that described various personality traits, characteristics, and environmental conditions that are conducive to encouraging creative thinking in students.

After reviewing and discussing various frameworks devoted to cultivating the ability to be creative, we used the English 10 Sophomore Research Paper as foundation for our discussions on how to cultivate students who were comfortable with ambiguity, could imagine alternate ideas, and in turn suspend judgment in complex situations. The very nature of the SRP asking students to create an original short story based on their research encouraged students to imagine alternate ideas to apply what they found in their research. But, Jason hoped that they could draw on Jenkins' (2006) list of media literacies and integrate that into their English 10 Sophomore Research paper by encouraging students to engage in more 'distributed cognition' where students would have to "interact meaningfully with tools that expand[ed] mental capacities" (p.4). He wanted to give students a choice whether to compose their short story via pen and paper or alternate digital routes that could expand the experience of reading of a story. He wasn't sure what students might think of and they weren't sure if the department would approve receiving the SRP in a variety of forms. Jason, Cynthia, and Peter discussed how the integration of more distributed cognition would work with the SRP, but could not come to any final

conclusions. However, the discussions on creativity and creative thinking prompted them to re-consider the modes students might deliver their SRP.

All three English teachers strongly believed the culminating research paper engaged students in both imagining and tolerating ambiguity, but questioned whether the institution of schooling and the conditions and structures that permeated schools allowed for creativity to really flourish to its greatest possibility. This led us into a discussion of how to cultivate students who weren't caught in the game of "school." Teachers were skeptical, but wanted to know how to "un-school" students who were so good at "figuring out how to get an A." Cynthia asked the following question, "How do we prepare students to be creative thinkers who take risks in a high-stakes environment?"

The crux of the question was the notion of "high stakes." Cynthia explained that students were so wrapped up in the high stakes of fulfilling requirements, graduating, passing the exam, and getting into an Ivy League college that anything that wasn't related didn't matter to them. Cynthia's question led the three of them to consider how they might change the education system at first, but that seemed overwhelming and unmanageable, so they considered how they might change their school district. That, too, seemed like it would take too much effort, so they considered how they might change their school. Peter asked jokingly, "do you think Ted would throw grad requirements out the window?" Cynthia responded, "better yet, we should just throw report cards out the window" (it was report card month at the time of the interview). Although Peter and Cynthia were obviously asking rhetorical questions in a light-hearted manner, they were ultimately questioning to what extent any change could occur in education to support an environment conducive to cultivating creativity. They decided in order to cultivate creativity to the fullest, the following structures would need to be eradicated:

- No more timed periods
- No more standardized exams
- No more high-stakes evaluations

- No more siloed disciplines
- No more discipline-specific departments

However, after they reflected on this list, Jason, Cynthia, and Peter realized that it brought them back to their first concern of changing structures within an education system deeply rooted in a history of organized routines, efficiency, and compartmentalization. At that very important juncture in the discussions, I re-directed them to think more about their perceptions of creativity as opposed to the structures that hindered creativity. I hoped they would realize that although the institution of schooling and all of the rituals and routines within it caused obstacles and acted as hindrance to the cultivation of creativity, it was ultimately a teacher's perception of what was important that created the environment in which students were given opportunities to be creative.

Jason responded with a dramatic acknowledgement of his part in perpetuating the cycle of old school ideologies. He shared that it was the way he thought about what schooling should do for students and what his role as a teacher should be in order to cultivate creative thinking in his class. He said that he wanted to take more agency, to be an advocate for students and what needed to be emphasized in the classroom in order to encourage 21st century thinking. Later in the year, he created a unit around the novel *EAARTH* by Bill McKibben that required students to imagine possibilities and suspend judgment in order to solve ecological problems the world was experiencing. He posed a local problem to students that he perceived asked them to engage in imagining and tolerating ambiguity:

Mr. Xanthus has died and left 500 acres of arable land in upstate New York to the town of Valdovia. The town Land Use Commission has to decide which of two candidates applying to lease the land will provide the most beneficial effects . (Consider factors such as ethical , economic, aesthetic, etc.) Candidate A: Zarathrustra -- a large-scale industrial agribusiness. Candidate B: a network of small-scale, for-profit locally-owned farms. Both candidates promote primary and multi-use possibilities for the land. You are a member of the Land Use Commission and wish to persuade a member of the group who opposes your viewpoint. You are to write an Op-Ed piece for

your local newspaper, using Rogerian argument as well as three sources from your notes/readings stating your argument.

Jason intentionally used Rogerian Argument as a debating technique to provide students with the opportunity to suspend judgment when thinking about the problem by taking both sides of the argument. Jason described Rogerian Argument in the following manner:

One of the greatest challenges for a writer of arguments is to keep the audience from becoming so defensive and annoyed that it will not listen to anything the writer has to say. Sometimes audiences can feel threatened by viewpoints different from their own, and in such cases persuasion can rarely take place. The psychologist Carl Rogers developed a negotiating strategy to help people avoid such situations; he called it "empathic listening." In an empathic position, the writer refrains from passing judgment on the audience's ideas until he or she has listened attentively to the audience's position, tried to follow the audience's reasoning, and acknowledged the validity of the audience's viewpoint (if only from a limited perspective). By trying to understand where the audience is coming from and avoiding loaded or attacking language that might put the audience on the defensive, the writer shows empathy for the audience's viewpoint and opens the door for mutual understanding and respect. This psychological approach encourages people to listen to each other rather than to try to shout each other down. Because it focuses on **building bridges between writer and audience**, and places considerable weight on the values, beliefs, and opinions the two share, a Rogerian argument doesn't emphasize an "I win-you lose" outcome as much as classical or Toulmin arguments do. Rather it emphasizes a "You win and I win too" solution, one where negotiation and mutual respect are valued. Thus, it is particularly useful in psychological and emotional arguments, where *pathos* and *ethos* rather than *logos* and *strict logic* predominate.

Jason's choice of utilizing Rogerian Argument provided students an opportunity to step away from the traditional style of debate. It challenged students to consider both sides of the coin without passing judgment by teaching them how to "carefully" choose vocabulary that would steer away from judgmental language. Jason chose to begin preparing his students to think differently by equipping them with vocabulary first. Just as Jason learned a "new language," a critical 21st century discourse, during his journey of becoming a more 21st century educator, he started by preparing his students for a similar type journey.

**A Newly Adopted Critical 21<sup>st</sup> Century Discourse.** For Jason, it was a newly adopted discourse as he completed the last semester of his second year of teaching. Jason demonstrated the most change by the end of the PD initiative, as he experienced a drastic learning curve in just gaining knowledge on how to think critically about texts and the literature he taught. One of Jason's most eye opening experiences was during our discussions on anthologies and why educators used them. Jason had believed that when a text was published and put together by a publisher such as Norton, the pieces chosen to be part of the anthology were the most important pieces. He had forgotten to consider the business aspect of book publishing; how the inclusion of select literature automatically excluded other pieces of literature; and the biases that run through all texts.

Jason's learning curve was highest of the three teachers as he learned about Americanization in schools, various critical pedagogies, and methods of self-reflection to tease out underlying beliefs and assumptions. Jason also demonstrated the most change as he tried to apply his new knowledge consistently to his daily practice. Beginning with his unit on *EAARTH* and Rogerian argumentation, Jason also changed two units following his *EAARTH* unit where Cynthia and Peter, changed their Lord of the Flies unit and 11<sup>th</sup> grade world literature syllabus, then did not change any other units until the following year. Lastly, Jason demonstrated the most change in his perceptions of self as he continuously self-reflected about himself as a teacher, his teaching practice, and how he began to see himself as an educator in the 21<sup>st</sup> Century. Often Jason reflected in faculty meetings and board of education meetings where he shared his testimonial of 'change' through a presentation of a particular unit he had adapted due to the EEF PD initiative. It was during those presentations that I could align his interview transcripts to the units he presented.

**An Acknowledged Critical 21<sup>st</sup> Century Discourse.** For Cynthia, she acknowledged the need to critically examine literature and her own beliefs and ideologies, but often returned to worrying about the logistical nature of participating in a

PD initiative that required extra time or time away from her daily teaching duties.

Cynthia was not able to move past currently existing structures within the school. She continuously asked,

How are they going to get rid of departments? How are they going to get rid of high-stakes exams? It would be mayhem, total chaos. There needs to be some sort of structure. I think they should just grade creativity. Make creativity high-stakes too and then they'll have to care about it.

Cynthia met up with an obstacle and could not overtake it at the third stage of adopting a Critical 21st Century Discourse. She, in turn, learned a new language and was able to change her instruction by infusing select ideas from the EEF Matrix into her teaching philosophies. However, when I asked Cynthia whether the EEF Matrix and PD sessions changed the way she taught or thought of her teaching practices, she shared, “No, I don’t think EEF has changed me in any way, to be totally honest.” Although Cynthia did adapt a few lessons and a unit over the course of the PD, she did not feel she changed or experienced any eye-opening Aha moments. She perceived herself to be the same with the exception of learning a few technical vocabulary words that could now help name things she was already doing in her classroom. In this respect, Cynthia only changed by increasing her knowledge set. She did not experience change in the way she viewed her existing assumptions, or, in changes in practice.

**A Reinforced Critical 21<sup>st</sup> Century Discourse.** For Peter, he didn’t necessarily adopt a new discourse, rather, he reinforced and dug a little deeper into knowledge he already possessed prior to beginning the PD initiative. He had already understood what it meant to self-reflect or examine oneself critically. Of the three teachers, Peter could clearly acknowledge where his beliefs and ideologies originated from and how his understandings of the world impacted the way he read literature and taught literature and was the most familiar with concepts of defining world literature and debates surrounding teaching literature from outside the Western canon. However, he admittedly was not utilizing his prior knowledge explicitly in his daily instruction. Peter still considered

himself a novice teacher and was overwhelmed by the daily tasks of the profession and put aside his previous knowledge to fulfill his duties (to get students to read, write, articulate their ideas, pass their tests, and complete report cards). Peter suggested that teachers should just try to integrate some of the frameworks that we discussed earlier into their daily instruction and see if their students got more creative: "I mean why don't we just try some of these out? We don't have to re-invent the wheel and change EVERYTHING. I mean they'll get it." Peter demonstrated a willingness to try new approaches to instill creative capacities in students, but he overlooked the concept that students would have to realize that they were safe to take risks and that there were no right or wrong answers by cultivating environments that promoted this way of thinking. He believed that if he tried out some new teaching strategies that would be enough. Peter began the PD process with an already existing critical discourse around literature and education. When I asked Peter whether he believed he changed because of the EEF Matrix or the PD he had been through, he shared, "I mean yes, I definitely think I have reflected on some of my initial ideas about certain things, but I really think this was already existing before this all began." Peter experienced change in subtle ways. He did go through periods of time where he re-evaluated his assumptions and ideologies but always returned to the fact that he was okay with the assumptions and ideologies he possessed. He didn't think they needed to be changed. The PD process certainly disrupted his beliefs from time to time to allow for re-evaluation to occur, but in the end he always returned to his original mindset that already included a version of Critical 21st Century Discourse. Peter did however ask to be the EEF point person for the English department at the end of Phase one and helped mentor other colleagues who were not part of Phase one adapt one unit. In total, Peter helped adapt two units.

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The acknowledgement of reading critically inherently shaped the way in which the teachers read, interacted, and taught literature. Reading critically allowed them to reflect

on the assumptions that impacted the perspectives and meanings they took from a text and the judgments and conclusions they made of a text. In going through this process with these Jason, Cynthia, and Peter, and in reflecting on how they respond, I am led to believe that reading critically may lead students and teachers to engage in more critical discourse around literature. Reading critically may also lead Jason, Cynthia and Peter to consider a more critical pedagogy when teaching and help them continue to grow towards a more 21<sup>st</sup> Century way of thinking about education, their roles as teachers, and students' roles in the world upon graduation. Reading critically and critical discourse can allow individuals to “recognize that understanding requires looking beyond the nations borders, and understanding how the nation is seen from vantage points beyond its borders” (Fishkin, 2005, p. 20). Adopting a critical discourse allows us to look beyond sanitized versions of all types of literature and consider the missing pieces, “borderlands, crossroads, and contact zones that disrupt celebratory nationalist narratives” (p. 19). It is with critical discourse that we are able to pinpoint where our gaze falls when reading literature. This may be the most important reason for a critical discourse, as literature in the 21st century is no longer static or bounded by the borders of a nation. Literature in the 21st century “depends on the breaking down of paradigms; it depends on the straddling of two or more cultures” (Fishkin, 2005).

Teaching literature in the 21st Century pushed Jason, Cynthia and Peter into territories of discussion often left untouched that required students to draw on perceptual and ethical thinking capacities founded in humility, compassion, and a tolerance for ambiguity. No longer was it sufficient for students to satisfy the requirements of a course because Jason, Cynthia, or Peter told them to. No longer was it sufficient for students to memorize and recite passages without contextualizing and rationalizing the multiple perspectives and experiences that lay hidden in the texts they read. In hopes of cultivating a more 21<sup>st</sup> Century classroom, Jason, Cynthia and Peter needed to engage their students to tolerate ambiguity, engage with humility and compassion to “challenge notions of



standardization, close-ended questions, singular textbooks; it [would] meant not ending a lesson with 'In conclusion...' but 'In media res' where one is always in the middle of engaging with the affairs of the world and is also aware that this is a life-long, never-ending quest for truth” (Scheffler, 1999 as cited in Choo et al., 2010).

## Chapter VII

### IMPLICATIONS AND CONCLUSION: EDUCATION'S CONTINUING EFFORT TO PREPARE FOR THE 21ST CENTURY

#### **Misconceived Notions of Transcending Social Issues**

I was walking down the hallway of Parnell High School after a PD session finished and overheard a group of teachers talking. They were discussing the EEF Matrix (see Table 8) we had introduced earlier that day. Teachers who were not part of the initial creation of the EEF Matrix congregated over by the faculty lounge; they were waiting in line. Jennifer, said excitedly,

I think this effort to become more 21st century is great. I think it's really, really important. You know, I was looking at the Matrix, and I thought to myself, these capacities really transcend issues of diversity and socio-economic status. I mean our students don't have to worry about all of that stuff when they're using the Matrix. This is a really fantastic tool. Anyone can use it. It doesn't matter who you are. I can't wait to start using this and show my kids.

Everyone in line nodded in agreement. Perhaps the document was so new that the other teachers nodded because they had yet to digest the information deeply. Or maybe Jennifer had a dominant personality that people usually agreed with what she had to say. Either way, I'm sure the teachers standing around asked themselves, "Do I agree with what she's saying? I mean why not? A document that could eliminate all social turmoil in the world? Why wouldn't you want to incorporate that into your teaching practice?"

At first mention, I'm sure it sounded like a real possibility, a really good one at that. But teachers had yet to ask themselves, "Is this what we're (as a district) really trying to achieve? A transcendence of social issues so we don't have to deal with them anymore?" Jennifer held the handout with the EEF Matrix printed on it like it was a golden ticket. I imagine that she stood in line talking to her colleagues while envisioning a utopian education system. She pictured the eradication of racism, the absence of classism, the elimination of sexism, erasure of heterosexism (Blackburn, 2002), and the obliteration of ableism. I pictured everyone in her mind smiling, dancing, and drinking milk and honey.

Jennifer walked away from a PD session with a misconception of how to use the EEF Matrix. She had missed, entirely for that matter, the underlying messages peppered throughout the Matrix. She had read the document superficially and literally and had not engaged in a critical analysis of what each of the capacities on the Matrix was challenging students and teachers to do. Jennifer, like so many other teachers who attend PD sessions, learned something new and wanted to use it the very next day without further self-reflection, contextualization, or re-evaluation of what she already knew as an individual and a practitioner. What she was trying to do wasn't her fault. She wasn't to be blamed for her enthusiasm and self-initiating excitement. She was doing what many teachers who attend PD sessions long to do: learn something today and use it tomorrow. No ifs and or buts. "Give me something I can use in my classroom or else why am I here? Why are you (the facilitator) wasting my time?"

Jennifer's experience demonstrates that it takes much more than a handout, or one discussion during a PD session, to effectively and accurately provide professional development for teachers. Gaining new knowledge, making meaningful connections, applying what you've learned, and reflecting on your practice are only a few important exercises practitioners should engage in to make most of their PD experiences. Most importantly however, practitioners need to discuss, reflect, and engage with others in

education to consider other perspectives, new possibilities, share experiences and to learn from one another. For the EEF PD initiative, teachers shared their experiences through a common language. A language they built as they maneuvered through the EEF PD initiative. A language that helped teachers across the district consistently define what it meant to educate in the 21<sup>st</sup> Century. A language that has now been named, a Critical 21<sup>st</sup> Century discourse.

### **Cultivating a Critical 21st Century Discourse**

Many perceptions, teaching practices, and ways to view the world changed in Parnell School District as the EEF PD initiative continued to spread from grade to grade and teacher to teacher. I observed this in the way teachers spoke to their colleagues and students, and how they began to speak about themselves and the district's goals for a 21<sup>st</sup> century education. In short, teachers across the district began to speak differently. A new language emerged among the faculty and administration—a new language rooted in the many discussions both in and out of classrooms, during and outside of PD sessions, at the water cooler, and in formal presentations to the community. Some teachers were beginning to think differently. And some were most certainly beginning to act differently.

The discourse that was being cultivated differed from critical social theory discourses that are commonly be rooted in multi-culturalism (Banks, 1991, 1977, 2009; McCarthy, 1997; Sleeter & McLaren, 1995), race (Ladson-Billings, 1994), gender (Alexander, 2008; Blackburn, 2002), class (Bourdieu & Patterson, 2002; Nieto, 1999; Orłowski, 2011), or ability (Reid & Knight, 2006). Rather, a discourse rooted in a critical examination of one's assumptions and their role as a 21<sup>st</sup> century educator ensued. These critical examinations acknowledged many social theories through a 21<sup>st</sup> century lens that

challenged teachers to keep two key concepts at the forefront of their critical examinations: (1) to always consider the impact of their decisions on humanity, and (2) to envision a constantly evolving participatory culture in the 21st century. Like learning any new language, teachers went through stages of development to finally arrive at a Critical 21st Century Discourse. For some teachers, they continued to go through the stages and never mastered the new language. It was inevitable that some teachers never reached a full understanding or became completely fluent in the new discourse, in turn never adapting their daily instruction to reflect the new discourse deeply. There were some possibilities of teachers trying new approaches, but at a basic or superficial level.

Although the mission of Parnell School District was (1) To develop and implement a valid and reliable internal assessment framework that measured student achievement of specified, high-priority 21st century skills, competencies, and understandings, and (2) To inform and drive instructional decisions and innovations in the classroom, another overarching goal surfaced during the implementation of the EEF PD initiative. A third goal that emerged through the work of the PD Initiative focused on urging teachers to consider a world community that embraced, understood, acknowledged, and was comfortable with difference, while concurrently troubling those understandings by critically re-examining differences to explore new assumptions while re-evaluating their existing assessment, curricular, and instructional activities.

The EEF PD Initiative presented ideas and concepts among the teaching faculty, in hopes of a paradigm shift toward a more cosmopolitan disposition by encouraging teachers to consider their current beliefs about education, citizenship, and 21<sup>st</sup> Century teaching and learning. Teachers were encouraged to become

agents/advocates of a more critical philosophy of education by re-examining their understandings of “education” "community," "diversity," and "perspectives" with a critical eye through the use of the EEF Matrix.



Figure 32. A Recipe for 21<sup>st</sup> Century Thinking

### Discussion on Critical 21st Century Discourse and Its Stages

Practitioners who anchor their teaching philosophies and practices in critical examinations of social theories interrogate the politics and meanings of their teaching practices as part of a larger project to build democracy, [and] social justice (Chubbuck & Zembylas, 2008 McLaren, 2003; Giroux, 1997, 2004). These educators continuously grapple with locales where practices exclude individuals based on sex, age, ability, faith, sexual orientation, race, and class (Boler, 2004).

Although the construction and the extent to which Jason, Cynthia, Peter (Micro Study) and Robert, Jessica, Eugene, Jamie Lynn, and Kevin (Macro), in this study engaged in the stages of adopting a Critical 21st Century Discourse fluctuated through time and differed depending on each teacher’s own obstacles and the types of experiences encountered with their students, colleagues, and PD facilitators, the range of change that affected the teachers’ perceptions cannot be ignored. By drawing on all of the experiences during the PD initiative and the moments of uncertainty, confusion, and disagreement at times, the three teachers in the micro study and several other teachers in the macro study, even if they did not demonstrate fluency in a Critical 21st Century Discourse by the end of the PD initiative, all self-selected to "improve" their practice and

themselves as practitioners by offering to be part of the initiative. They all hoped to enhance their students' learning opportunities by essentially disrupting their usual teaching routines and offering planning times, and before-/after-school time to participate in an initiative aimed at improving education by making it more 21st century. The emergence of a Critical 21st Century Discourse became a foundation for Jason and Peter's, educational philosophies and practices.

**Preparing teachers for the 21<sup>st</sup> Century.** The discussions that took place between teachers across the district and myself during the EEF PD initiative, to challenge thinking, obtain new knowledge, or to reflect, provide an example of the study of perceptions and Critical 21st Century Discourse that would further inform our understanding on how to prepare teachers to teach in the 21st century. Recognizing how to nurture and develop Critical 21st Century Discourse that can be utilized in teachers' daily teaching practices, both pre-service and in-service teachers can begin to carve out spaces for troubling assumptions, critically examining social issues, and envisioning possibilities in education that would impact humanity as a whole.

First, Critical 21st Century Discourse acknowledges that 21st century educators understand the role of social theories in systems and practices that impact us on a daily basis and integrate perceptual and ethical dispositions that challenge educators to always consider the impact on humanity. Jason demonstrated this during the final discussions around why anthologies are used or should be used in high school English classroom across the world. At first, Jason demonstrated his understanding of anthologies as published works as a neutral understanding of texts as static and discrete. He perceived the anthology to be an object, more than a text, absent of any social issues, and he did not believe the existence of anthologies would raise any critical examination of various social theories. He basically understood the texts within anthologies as important and key texts and didn't know why we would have to question or examine their existence. Jason reflected on the following questions: What texts are represented in this anthology and

why? Why aren't other texts included in this anthology and why? Who chooses what is included in an anthology and why? What countries are most represented in anthologies and why? How are awards and prizes (Nobel or Pulitzer) exclusionary and why? What are the "center and periphery" in terms of world literature and why? How do boundaries impact how you think about world literature? How can you re-conceptualize boundaries in order to represent a 21st century model of thinking? His reflections led him to realize the political, economic, and social impact a document like an anthology has on humanity when he stated, "Well, I can't be part of this any more. I'm just perpetuating the cycle. So what do you do? Not teach from anthologies anymore? How do you even get texts that aren't available in bookstores?" Jason found himself in a stage of realization where he acknowledged the presence of critical social theories and how they were impacting society. Then he moved to a stage of wondering, as he tried to reconcile what his role would be in an effort to impact the perpetuation of norms. Third, Jason reflected on the assumptions he carried within himself and re-evaluated his own understandings and belief systems surrounding texts, authorship, the written word, and his role as a White, male, high school teacher. Jason saw something within himself that was not visible to him prior to the anthology discussions. In the beginning, he was enthusiastic to declare his joy and commitment to teaching "all types of literature" and how to "think critically". After the numerous discussions on 21st century education, the PD activities he engaged in, and the comments/perceptions of other teachers that may have impacted his thinking along the way, he began to question his understandings and perceptions and adopted a new discourse that led to different ways of teaching.

**Eradicating Systemic Structures.** Another implication this study yields is that educators must acknowledge what it takes to decimate structures of power, privilege, racism, and colonization (Chubbuck & Zembylas, 2008; Ladson-Billings, 1994; McCarthy, 1997; Boldt, 1996). These systemic structures exclude groups of people by categorizing them as *other* (Boler, 2004; Goodwin, 2003; Vinz, 2000). Perceptions of



exoticism and acts of dehumanization and desensitization remove individuals from responding emotionally to excluded groups of people with compassion, caring, understanding, or remorse (Chubbuck & Zembylas, 2008), whereas Critical 21st Century Discourse engages educators in perceptual, ethical thinking and makes certain teachers draw on multiple perspectives. Providing teachers, both new and old, opportunities to reflect on their intrapersonal/non-cognitive skills allows them to tease out their emotional understandings of issues related to justice (Darling-Hammond, 2004).

Critical 21st Century Discourse requires teachers to investigate their assumptions and beliefs, pushing them out of their normal routines and ways of thinking, disrupting the walls and boundaries, making them feel simultaneously uncomfortable and driven, in order for them to deconstruct how they came to believe what they do and know. It is a direct recognition that perceptions are not necessarily accurate. It is acknowledging that what they perceive ultimately defines what they choose to see or not to see (Chubbuck & Zembylas, 2008). In addition, Critical 21st Century Discourse challenges educators to examine how their perceptions were built over time, but also to consider the impact their perceptions have on them as a member of a global community. It pushes educators to consider the perceptions of their students and other people across the world as members of a global community where boundaries are less defined and transnational sentiments are becoming more central to people's identities.

For example, reflecting on Jennifer's discussion with her colleagues in the hallway of how the EEF Matrix transcended the social issues that undergird "individualism, localism, and nationalism" (p. 100), it became apparent to me that she failed to consider the EEF Matrix's goal to empower her with the agency to highlight 'latent/explicit ... misunderstandings of territoriality and homogenization" (Beck, 2006, as cited in Schoene, 2011, p. 100). Jennifer engaged with the first goal to begin thinking differently but didn't accept the task to become an advocate of the social theories that acted as foundation to the document. Jennifer had missed the second goal of the PD session

entirely. She had heard or chosen to hear the first part of the session (or perhaps she was so enthralled by the first part--the notion to think in a more cosmopolitan way--that she couldn't think of anything else but that). She embraced and understood the district's attempt to move their teachers toward a more cosmopolitan frame of mind, but did not internalize or make sense of what she had to do once she adopted a cosmopolitan way of thinking and knowing. She failed to critically analyze how the capacities of the framework offered teachers opportunities to probe social issues more deeply. The result was a superficial understanding of what the EEF Matrix was to be used for and a utopian vision of what a 21st century education should be. As Schoene (2011) posits, Jennifer's view of 21st century education "recognized difference ... and deteriorate[d] into a facile utopianism" (p.102)

**The Stages of Learning.** Other important factors are the stages that lead up to the adoption of a new way of thinking, and the surrounding emotions and environmental conditions that propel or hinder the practice of 21st century teaching through the adoption of Critical 21st Century Discourse. Although the adoption of Critical 21st Century Discourse is certainly not a linear model of learning, moving from point A, to point B, to ultimately reach point C, there were specific stages teachers needed to surmount in order to engage in the next stage of reflection and learning. In most instances, teachers experienced a jolting eye-opening experience, which I refer to as an "Aha Moment." Jason experienced several aha moments, but the most memorable was during our discussion on anthologies when Jason exclaimed, "I get it. It's the who's missing piece." That was a moment of realization. From that moment on, Jason knew he had to think differently about the way he taught students how to read texts critically.

In other instances, teachers experienced a sense of clarity and made a direct connection to an authentic moment in their lives. When Jessica felt "a deep hole in [her] stomach" as she listened to her students talk about their Mexican gardeners, she knew she had to teach her students to think differently, to empathize more, to take on more

perspectives. That moment wasn't a moment of realization, like Jason experienced, but instead, acted as a catalyst to urge Jessica to finally take agency for what she believed in and what she knew wasn't right. Both these moments helped move Jessica and Jason from one stage of learning to another.

It was evident that once teachers experienced an eye-opening moment or made a meaningful connection to a current or past personal experience, they finally moved to engage in the next stage of adopting a Critical 21st Century Discourse. Stages occurred concurrently for Peter, however, he still did not move from stage to stage, even though he straddled two stages until the previous one had impacted him in some meaningful way. I attribute this phenomenon to Bruner's theory of how people learn new concepts. People begin by becoming aware of a concept and gather information (introduction to a new topic). Second, they attempt to understand or make sense of their new knowledge by situating it in something familiar. Third, people find ways to apply their new knowledge and observe it in action (they want to be convinced that what they have just learned and applied is worth keeping or not). Finally, people choose to apply new knowledge to other meaningful situations that directly impact their lives in some way. This type of "active learning" results in the adoption of new ideas and perceptions; a change or adaptation in existing knowledge; or the creation of hybrid ideas/products that draw on existing and new knowledge (Choo et al., 2010).

**The conducive learning environment.** However, when environmental conditions stand in the way of teachers' motivation to learn or be active participants in adopting new ideas, it is redundant to speak of the possible "Aha Moments" teachers aim to achieve. Thus, it is important that administrators, educators, and policymakers consider the implications of placing educators in sub-par professional development situations. It would be proactive to study the contexts of professional development models that challenge teachers to engage in paradigm shifts to prepare administrators and higher

education professional development providers how to most effectively prepare in-service and pre-service teachers to be educators in the 21st century.

For example, Cynthia and many other teachers in the PD initiative moved back and forth from being fully on board with the PD initiative. They were often hesitant and tentative about fully investing in the initiative because of the many demands in their regular teaching duties. Cynthia and Marilyn often referred to having to ‘teach their students how to read and write’ as their main concern, and the length of time it would take to teach abstract concepts like Suspending judgment and how that took away from her time to prepare as a teacher. Cynthia was a perfect example of a teacher who directly reacted to the conditions of the EEF PD initiative. Cynthia received a lot of support since she was one of the three teachers for the micro portion of this study, but still managed to be overcome with logistical worries. It would be interesting to study teachers who had little support but still managed to experience change.

**Situating Critical 21<sup>st</sup> Century Discourse.** Lastly, Critical 21st Century Discourse derives understandings from the perceptual experiences discussed above and situates itself within the context of schooling. The existing culture of schooling may not encourage or provide a basis for the goals of a 21st century education rooted in Critical 21st Century Discourse. In some school districts where state assessment scores are in jeopardy, funding is minimal and teacher turnover is at an all-time high. As discussed early on in this study, when necessities are not provided, teachers' first reactions are to fill those missing necessities first. They are more likely unable to focus on new initiatives when their job security is in question, the administration is not supportive, and there are external pressures. However, there are instances when continued and consistent attempts at implementing new ideologies when conditions are poor are indeed possible, “even in the face of larger issues of school culture” (Cubbuck & Zembylas, 2005, p.311). When a community’s response continues to reproduce normative responses, research has shown outliers.

Deep transformative change is a continuous journey. Once one achieves change, he or she may change again multiple times after that initial change. Resting in a new state of being is merely temporary in a state of deep transformative change or when adopting a language; whether it is new or a re-evaluation of an existing language, there is always room for change and difference. Practitioners, policymakers, and scholars can learn from the experiences of the teachers at Parnell School District and their journey of implementing 21st century approaches to teaching and learning in their classrooms. This study provides a rich Action Research Study that provides context, situated examples, and interpretations that may guide teachers as they too have to begin navigating what it means to educate for the 21st century. Although this study is of three individual teachers in one school district, there are similar and consistent struggles that all practitioners experience in relation to professional development and the adoption of new concepts/initiatives.

### **Educating for the 21st Century Through Critical 21st Century Discourse**

If teacher educators and administrators assist new teachers to understand the stages of learning that happens when learning how to teach for the 21st century, by sharing experiences, engaging new teachers in deep conversation about critical theories, and encouraging reflection and meta-analysis of their progression/process of learning and changing, new teachers may be more inclined to adopt a Critical 21st Century Discourse and 21st century way of educating. The stages of adopting a new concept, examination of the EEF matrix, and an examination of the activities teachers engaged in during the PD initiative are all important instruments to examine to help promote Critical 21st Century Discourse.

I would like to offer the possibility that my analysis can help school districts implement successful system-wide professional development programs that are effective

and provide results that provide evidence of Critical 21st Century Discourse and the teaching that accompanies it. I also suggest that my analysis can support teacher development in regard to 21st century teaching and learning practices. Examining the process and conditions of learning and how it impacts perceptual change in teachers to impact their daily teaching activities provides an in-depth understanding of how change occurs in varying conditions and in response to the social and political context of mandated initiatives. Critical 21st century discourse can serve as a central and compelling tool for teachers who are unsure, wondering, or motivated to begin teaching with a more 21st century focus on education. As my study examined the experiences of predominantly White and Asian teachers across Parnell School District, it is necessary to examine the experiences of teachers of color and other racial backgrounds that were underrepresented in this study in order to understand how Critical 21st Century Discourse relates to their experiences.

My analysis provides examples of the impact and importance of teachers' perceptions and how they directly affect teaching in the 21st century. My analysis connects the cognitive and emotional processes teachers' experience, offering insight into some of the cognitive and emotional responses that worked in tandem to affect teachers' perceptions of teaching and learning for the 21st century. The perceptual work of teachers in one isolated instance is certainly important; however, it is clear that perceptions related to teaching for the 21st century produce alternate perspectives and are an integral part of daily teaching practice, intended for any century, indicating the need for continuous attention and study.

What is currently absent in the framework of perceptions as constituent to changes in teaching practices is a further examination of how teachers' perceptions are often inundated with uncertainty and tentativeness with regard to new initiatives and Critical 21st Century Discourse because it is rooted in so many social issues that are often sensitive topics for individuals to talk about. More information is required on how

teachers makes sense of the assumptions that make them who they are, their teaching philosophies as seen through their teaching practices, and any external influences (political, economic, cultural) with regard to their perceptual understandings and how those perceptions directly affect their actions. It would be extremely reductive to overlook the uncertainty and tentativeness of teachers' perceptions of engaging in Critical 21st Century Discourse by narrowing the adoption of this common 21st century language as a one-dimensional cognitive activity. This reduction would oversimplify complex teacher interpretations of their learning and stifle any opportunities for additional questions to emerge that would help us understand teachers' self-efficacy more deeply. Understanding why some teachers change and others do not when learning conditions are similar would benefit teacher development in various ways.

Focusing on and analyzing teachers' perceptions, further research is needed to examine various unanswered questions. How do different contexts impact how teachers engage in Critical 21st Century Discourse? How do non-traditional avenues of exploration impact teachers' pursuit of a Critical 21st Century Discourse? How does Critical 21st Century Discourse deepen an individual's understanding of what it means to teach for the 21st century? How are teachers' identities affected who engage in Critical 21st Century Discourse? How do teacher experiences vary based on teachers' racial or socioeconomic backgrounds?

Deconstructing teachers' perceptions of teaching for the 21st century via Critical 21st Century Discourse impacts both practitioners and policymakers at various levels. Specific focus needs to be placed on the affective characteristics of Critical 21st Century Discourse that converge with the perceptions of teaching for the 21st century. Not paying enough attention to this important intersection of a discourse's affective qualities and teachers' perceptions would inevitably stunt teacher development and result in the perpetuation of traditional schooling rituals and philosophies. Critical 21st Century Discourse, in addition to a historical and political understanding of power dynamics

found within schools and the world; recognizing the transactional nature of teachers' perceptions; and how teachers' perceptions translate into understanding teacher relationships, practices, and policies that impact teaching for the 21st century, through Critical 21st Century Discourse, offers us the opportunity to transform our understandings on how to 'prepare, support, and study' how teachers adopt Critical 21st Century Discourse to adapt their teaching practices for the 21st century.

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In 2011 When Ted Scots projected his PowerPoint presentation up on the screen, he told teachers, "For this ride, you will need to bring (1) Creativity, (2) A Collaborative spirit, (3) Flexibility and comfort with ambiguity, (4) And resolve". At the end of 2012, I sat in an office with eight of the forty original teachers who volunteered to part of the EEF Initiative. "Athletics Office" had been painted over on the door, and the new door plaque reads, "Room 119. Envisioning Education for the Future (EEF Office)". In the 10x10ft room, an IPAD played through EEF promotional video clips while photographs of teachers working with students and colleagues strategically hung on the walls. The EEF Matrix was in poster form and dead center on the main wall. Above the poster was a quote, "I will never go back to the way I used to teach. Once you experience EEF, you will never, ever, look at teaching the same".

We sat around a large rectangular table and Eugene the new EEF leader in the district asked us, "okay, how are we going to get Kindergarten on board?" We all sat back and imagined what creativity, collaboration, flexibility, comfort with ambiguity and resolve looked like in Kindergarten. After a brief pause, we all realized that we were taking the EEF initiative back home. To the very place where all the capacities



originated. Kindergarten. Where students are encouraged to ‘role play’, ‘simulate’, ‘perspectivize’, ‘suspend judgement’, ‘innovate and transform’. We were returning to the birthplace of what it means to be an original and creative thinker. Kindergarten.

Somewhere along the way students forgot, or worse, were told to ‘color in the lines’ and to ‘do what the teacher said’. All we had to do was convince the district that ‘coloring out of the lines’ might spark innovation, or ‘not doing what the teacher said might lead to inquiry. Eugene answered jokingly, “well, we’re not exactly sure how we’re going to do this, but that’s okay, we’ll just be ‘flexible and tolerate the ambiguous’. We just have to stick together and collaborate. And maybe, just maybe we’ll be filled with enough creativity to come to some sort of resolution to the problem”. We all laughed, but all joking aside, he actually made sense.

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## Appendix A

### **World Literature and Its Moving Boundaries.** In his book *What is World*

*Literature?* Damrosch (2003) states:

“My claim is that world literature is not an infinite, ungraspable canon of works but rather a mode of circulation and of reading, a mode that is as applicable to individual works as to bodies of material, available for reading established classics and new discoveries alike. This book is intended to explore this mode of circulation and to clarify the ways in which works of world literature can best be read. It is important from the outset to realize that just as there never has been a single set canon of world literature, so too no single way of reading can be appropriate to all texts, or even to any one text at all times. The variability of a work of world literature is one of its constitutive features--one of its greatest strengths when the work is well presented and read well, and its greatest vulnerability when it is mishandled or misappropriated by its newfound foreign friends” (p. 5).

Beecroft (2008) equates the globalness of world literature with verbal art. He questions just how broadly "literature" can be defined (p. 98) through a discussion of "literature(s)," and how it opens up the borders of rigid categories and ultimately leaves readers in undefined territories. As Beecroft leads readers into ambiguous terrain, he offers them an alternate way to view literature. He demonstrates the porous boundaries of global literature by offering examples of its dislocating characteristics from context to context. He posits, “I do not believe we need to (or can) draw firm boundaries around categories of verbal art in this context indeed, one of the most exciting aspects of a global literature is the extent to which it lends itself to *bricolage*, with texts serving different purposes in different systems of circulation” (p. 98). According to Cooppan (2004), world literature should be "read globally" because “reading globally thus trains our attention on something other than the inevitable lists that litter the battlefields of world literature courses” (p. 12).

## Appendix B

### Global: Perceptual and Ethical Capacities

In the late 1970s and 1980s, global education emerged in the United States in response to the OECD and World Bank report that knowledge was now the most important form of global capital (Frey & Whitehead, 2009). Intentionally steering away from limiting the definition of knowledge, OECD and World Bank highlighted technology to be the primary driver of knowledge and innovation in post-industrial societies. By the start of the 1990s, global education was widespread in school curricula across the nation. Global education was defined as:

An investigation of common human problems that transcend national boundaries (Frey & Whitehead, 2009), an exploration of the significance of world, as opposed to national citizenship involving ethical obligations to humanity (Avril, Hinderliter, & Stavroula, 2009), critical evaluation of governments and economic systems impacting the world (Davis, 2006), the acquisition of cultural capital that encompass possessing the ability to access, interpret and critique another culture through acquiring that culture's language as well as knowledge of its cultural texts (Guillory, 1993; Spivak, 2003), and the application of linguistic capital involving the ability to critically interpret all forms of texts that transcend culture including multimodal texts (Scholes, 1998; Kress & Jewitt, 2003 as cited in Choo et al., 2010)

It was clear that global education needed to negotiate different cultures, navigate texts and technological media, and acknowledge the capacities needed to be a global citizen. In *Cultivating Humanity*, Nussbaum (2003) provides narrative of Anna, a recent political science graduate who lands her first job out of college at a large business firm. Anna, graduating from a Midwestern college, quickly climbs the ranks and is offered a middle-management position in the company's new Beijing office. Nussbaum makes it clear that Anna must draw on her skills to navigate and manage both Chinese and American employees, draw on her creative and communication skills to communicate with her Chinese clients, rely on her flexible and imaginative nature to put herself in the shoes of those from foreign cultures (foreign to Anna and also to her clients), draw on dispositions to tolerate ambiguity, to think critically and creatively in order to solve non-standard complex problems, and finally to be able to draw on her expertise of technology and collaboration.

Nussbaum (2003) emphasizes an education that emphasizes the humanity needed to cultivate a world that is interconnected. Lingard, Nixon, and Ranson (2008) argue to achieve a world dedicated to the humanity of others, an emphasis on "deparochialising education" is needed. This type of education focuses on cultivating two dispositions within students: first, assisting students to familiarize themselves with their own culture so they can reflect and trouble their understandings of "nation" and "culture" as definitively bounded concepts; second, students are challenged to consider themselves as inter-related beings who are not only part of their own individual communities but the world at large. This aims to achieve a sense of global inter-connectivity. Curriculum that supports deparochialising education would use an interdisciplinary pedagogy that

facilitates students to extend their concepts of the local to the global. It would draw on an integrated code of connections found between siloed disciplines (History, Politics, Science, Geography, etc.) so students could recognize the connections between each field.

Lastly, a deconstruction of binaries would be facilitated by developing imagination and dispositions that demonstrate reflective openness to other cultures within students. Nussbaum (2003) refers to this as a "narrative imagination" or the "ability to think what it might be like to be in the shoes of a person different from oneself, to be an intelligent reader of that person's story and to understand the emotions, wishes, desires that someone so placed might have" (p. 10). This would be rooted in intertextual prior knowledge. This prior knowledge would draw on the histories of different cultures and communities in order to see from the perspective of others.

## Appendix C

### Creative Thinking Handout

As the interrelationship between critical and creative thinking often emerges within creative thinking models, Edward de Bono's (1985) Six Thinking Hats is an example. Each hat represents different mental processes when thinking critically and creatively. An individual can visualize putting on and interchanging hats as needed: The Yellow Hat symbolizes brightness and optimism; the Red Hat signifies feelings, hunches, and intuition; the Green Hat focuses on creativity: the possibilities, alternatives and new ideas; the Blue Hat is used to manage the thinking process; the Black Hat is judgment -- the devil's advocate or why something may not work; and the White Hat calls for information known or needed.



Figure 31. One

Representation of Six Thinking

Hats

Some theorists choose not to use linear representations of creativity and instead offer interwoven systems models and representations of the interrelationship between critical and creative thinking, underscoring the concept that the two are mutually important to one another and cannot stand alone. Of these systems, Nikola Orloev's (2010) Descartes System represents the development of several schools of thought joined together, "into a new school for creative thinking in the process of synthesizing/ analyzing, assessing and making decisions, includes 6 (six) main factors, of which three are of an objective nature and the remaining three are of a subjective nature" (p. 29).



Figure 32. Orloev's "Descartes System"



**Causal Factors.** Runco and Sakamoto (Sternberg, 1999) posit that creativity reveals itself differently in each person based on their past developmental, social, and educational experiences, labelling creativity as one of the most complex human behaviours. Sternberg and Lubart (1999) list six individual but interrelated propensities that cause creativity to occur. Each individual's intellectual abilities, knowledge, style of thinking, personality, motivation, and environment directly relate to his or her creative behaviors (Tepper, 2007). Creativity within each individual cultivates a tension between one's imagination and the rules of cognition to cause creative thinking, problem solving, and overall creative thought. Creativity is acknowledged as "an essential life skill through which people can develop their potential to use their imagination to express themselves, and make original and valued choices in their lives" (Tepper, 2007, p.17).

**Creative Products.** More often than not, creativity is equated to the creative products an individual creates. Assumptions that simply associate creative products to artwork, original ideas, and scientific discoveries are often made but clearly surface presumptions that in order to be creative means to always create a tangible product. Boden (1995) attempts to dispel these assumptions by moving creativity beyond tangible products and into conceptual spaces. Boden proposes that creativity occurs through exploring and transforming conceptual spaces, while Kleinman (2005) emphasizes the importance of cultivating creative processes in creative environments. Kleinman also stresses that creativity moves beyond products and more often than not takes on the form of ideas and conceptualizations. Martindale and Sternberg (1999) take the notion of conceptualizations and define creativity as sudden realizations "of an analogy between previously unassociated mental elements" (p. 22), moving creativity toward cognitive thinking. Similarly, Isaksen et al. (1993) observe the following interrelationship between creativity and cognitive processes:

Creative thinking [is] a cognitive activity that may result in a creative production that groups or individuals perceive as useful and new.... We call the products creative if they represent a transformation or a reconceptualization, have aesthetic coherence and appeal, represent a new configuration or connection of ideas, or serve some functional or explanatory purpose. Problem solutions have all these critical elements, plus relevance or resolution to the original problem. (p. 31-32)

**Creative Abilities/Skills.** Lastly, creativity is related to individuals' creative intelligence and abilities. Creative individuals are associated with already existing "domain-relevant knowledge and abilities...an innate motivation to innovate, and a foundation of pre-existing creativity-relevant skills" (Amabile, 1983). Similarly, Sternberg (1999) suggests that "creativity-relevant skills" encompass high motivation and perseverance, concentration, and the ability to cope with complex ideas and problems. In addition, Sternberg and Grigorenko (1997) discuss the interrelationship between practical, analytical, and creative abilities set within each individual's differing sociocultural context. The ability to be creative involves all three abilities simultaneously and is often displayed

through skills to create, invent, discover, imagine, suppose, or hypothesize.  
(Villanueva, PD Handout, 2011)

## Appendix D

### Humanist

According to Kliebard (2004), Humanist foundations were rooted in traditional academics and were considered the “guardians of ancient tradition”. During a time of change, the public grew sceptical whether teaching based on old traditions would be suitable for people in a new society undergoing industrialization. For humanists, education’s role was not to change students socially. Rather, humanists used education to instill reason, sensitivity to beauty, and high moral character within students (Kliebard, 2004). Humanists tried to right society from technological change by re-establishing the norms and values of traditional schooling, promoting cohesion and solidarity within society on the basis of what had worked in the past.

Humanists believed that education prepared students for life and ultimately college study. Education focused on teaching reason, the power to express one’s thoughts clearly and to have traditional courses of study as an integral part of one’s knowledge base (Kliebard, 2004). Humanists believed in education for all people (homogeneous curriculum) and strongly opposed the prediction of students’ future roles in society with differentiated curricula. Humanists attempted to uphold a traditional model of socialization (Durkheim, 2007). They tried to maintain hope by reducing inequality in schools (not differentiating curriculum). They aimed to build solidarity in schools, a collective conscience of what was being taught, cohesion through traditional courses and instilling values, beliefs, and morals (Bennett, 1995; Durkheim, 2007).

**Social Efficiency.** In 1901, *Social Control* was published by well known sociologist Edward Ross, sparking a desire for a more socially efficient society. Social efficiency was a method used to adapt education to a new industrial society and modernization. In response to the industrial revolution and sudden influx in immigration to North America, social efficiency groups used schools as direct instruments of social control (Kliebard, 2004). Powerful groups and individuals held the reins of social change. The factory model used in the Industrial Revolution permeated schools during this time. Like a factory, large complex concepts were whittled down into small components. Students were taught to become experts of one of the small components to minimize margins of error and to increase production. In turn, skilled tradespeople diminished, and expert pieceworkers replaced them. Like the factory, the school was an instrument for creating a stable and smoothly functioning society (Kliebard, 2004). Students were prepared to become skilled technical workers with specific roles in society rather than individuals who were taught academic subjects they would never use (Kliebard, 2004).

In addition to Ross’s work, Frederick Winslow Taylor introduced scientifically based management theories “to achieve the higher purpose of a more orderly and less contentious society” (Kliebard, 2004, p. 82). With the move toward a more efficient education and efforts like those of Ross and Taylor, it was only a matter of time before John Franklin Bobbit developed his analogy of education as a business, school as a “factory plant,” and school superintendents as

"educational engineers" (Kliebard, 2004, p. 83). Social efficiency groups created a new model of schooling that reduced waste by scientifically measuring students' abilities in order to produce individuals that would fill specific technical roles upon graduation in response to the influx of students at the beginning of the century, ultimately aiding the economic goals of a modernizing society.

Social efficiency groups valued technical skills and opened up social stratification, encouraging movement within social classes based on education and technical skill. They marketed movement among classes, with education as the tool to achieve that movement. Dominating social efficiency groups gained placement in commanding political positions (Inkeles & Smith, 1974; Kliebard, 2004), inadvertently helping the government and economy reproduce inequality within the structure of schooling (Apple, 1985). Answering to building pressures from the government and large businesses, many social efficiency advocates, such as Thorndike and Ayers, responded to performance concerns and "retardation" rates among students in public schools. IQ tests that were used during World War I to sort military recruits offered social efficiency proponents the epitome of a sorting tool.

**Social Reconstructionists.** On the other hand, theorist John Dewey had a very different idea of what education should be. Dewey (1902) recognized students holistically and not merely as the sum of scientific measurements. In contrast to the social efficiency view of individuals as parts of a well oiled machine in the factory of education, Dewey based his theory of education on guiding students to a deeper understanding of the world through his/her knowledge and interests. Social reconstructionists believed education should be used to rupture social inequities. Social reconstructionism can be characterized as "a new generation critically attuned to the defects of the social system and prepared to do something about it" (Kliebard, 2004, p. 157). The group based themselves on the idea of becoming activists to make positive changes. Similar to social reconstructionists, social meliorists today continue to wrestle against social efficiency movements and battle to enact social change. Postmodern theories that strive to uncover marginalized voices and unearth the "hidden" agendas of dominant parties represent the philosophy of social meliorist groups (Marshall et al., 2006).

## Appendix E

“Without dialogue there is no communication, and without communication there can be no true education” (Freire, 1970, p. 153). Embedded within the theories of various educational movements, we can still see that internal and external myths of rationality drive educational institutions and maintain power over people who are not aware. Schools and curricula continue to conform to a common script (Metz, 1989) perpetuating “behavioristic, positivistic, scientific tradition[s]” (Marshall et al., 2006, p. 141). Formal structures are ingrained into social reality, supported by public opinion and legitimated through educational systems by laws, social prestige, and dominant ideologies (Meyer & Rowan, 1977). A dominating scientific epistemology preoccupied with control and standardized outcomes robs children of their roles to participate in creating their own education (Marshall et al., 2006). Adhering to traditions of scientific language “has resulted in an emotionally eviscerated form of expression” (p. 110), eliminating passion. Reinforcing technicality and neutrality has promoted a curriculum devoted to “mechanistic language devoid of the playfulness and artistry that are so essential to teaching and learning” (p. 108). The very thought of how schools should work is shaped by external factors in the environment surrounding education. Rituals create legitimacy in society, and in turn, schools rely on powerful symbols. Often minority students, classified as different from the norm based on their race, sexual orientation, etc., reject the common script of schooling, as it “signifies betrayal of the peer group and of ethnic identity” (Metz, 1989, p. 28). Educators of the 21st century, however, need to be devoted to transformative agendas that examine issues deeply and have the strength to take action and question what ideologies have shaped them and their students (Glass, 2004); otherwise, curriculum and the organization of schools will continue to create dichotomies of normal and the other (Goodwin, 2003; McCarthy, 1997) through exoticization (Leonardo, 2004) and by underrepresentation of minority students in schools. Educators of the 21st century must aim to challenge students to think critically of the “tragic images of mainstream television and textbooks” (McCarthy, 1997, p. 34) and promote students to think beyond the paradoxes of identity and the other, encouraging students to confront the other within them (Boldt, 1996; McCarthy, 1997). It is evident that no critical pedagogical approach is ever a band-aid approach to eradicating systems of domination, or an aim to attain moral purity, but rather to engage students and teachers to think critically and become committed to the struggle for justice (Glass, 2004). Through awareness and education, these pedagogies focus on promoting students to challenge dominant ideologies.

There are a number of pedagogical approaches: liberatory pedagogy (Freire, 1970), culturally responsive classrooms (Gay, 2010, 2002; Knight, 2011; Ladson-Billings, 1994), socially just teaching (Chubbuck & Zembylas, 2005), and teaching for social action (Knight & Oesterreich, 2011), to name only a few, that focus on preparing students to think critically, aiming to uncover the social rules that mold social behaviors and facts (Popkewitz, 1998). These pedagogical approaches prepare educators to create curricula that are no longer looked at as

technical or documents of instructions but rather to provoke teachers and students to “reflect on what it means to educate, what it means to be educated,” and to push students to think (Pinar, 1995, p. 8). Major contributors’ reasoning to the reconceptualization of these types of curriculum argue that “orthodoxy often creates blinders to new possibilities” (Marshall et al., 2006, p. 142). In order for education to look beyond these blinders, a full range of approaches to educational problems is needed to thoroughly understand what humans are capable of. It is then interpreted that educators cannot be “limited to one set of assumptions about how we come to know ... to interpret, and to evaluate what occurs in schools” (p. 142). Educators are obligated to bear in mind both desirable and undesirable material to “formulate some response, however negative” (Pinar, 1995, p. 9). Within this space for dialogue, there is no room for civility, as “critical” classrooms are never “neutral ... they ‘comfort the afflicted and afflict the comfortable’ in the effort to build democratic movements for justice” (Glass, 2004, p. 22)

## Appendix F

### Virtual and Glocal: Hybrid Spaces Part I

The introduction of the idea of globalization came to be as a consequence of refraining from looking at progress as important and the main drive of civilization. During this time of "globalization," attempts have been made to transcend culture through multimodal texts through the creation of alternate spaces. The alternate spaces globalization provides for readers' interpretations of literature--and the perceptual and ethical thinking required for global citizens to engage in "reading globally" are important to consider for our next few sessions. In the past, the discovery of natural space in modern times and its research was built through artificial spaces by means of locomotion and communication. Following this creation was the discovery of global space via the production of virtuality.

Transforming space into a virtual one involved the interconnection of all points on the globe with a view of creating a space that lacked traditionally territorial tensions. This new space created by information and communication technologies, the media, and the notion of a "glocal" world was a space that we considered free from barriers such as distance, time, and physical location--thus facilitating the acceleration of information, maximizing capital speed, and always aiming for instantaneity. World literature is a prime example of traversing both virtuality and glocal space as texts undergo multiple and various translations; texts are re-printed in various countries; texts appear on Kindle and Amazon before they're even published in print; and the Nobel Prize ceremony is webcast over the Internet for the masses to watch. As spaces are navigated from various points both virtually and physically, world literature offers a "geopolitical unconscious (that) generates the immediate and self-reflexive awareness of living in an interdependent world with others and the sense of positionality that sets them in motion to explore comparative modes of self-determination and "to anchor their identities in the midst of historical flows" (Oruc, p. 18)

Parallel to this virtual space, which simulates reality up to the point where it becomes a simulacrum, the perception of space is affected by the circulation of capital. We can say that space is created according to the way capital finds possibilities of multiplying itself. Capital expansion, of differentiating and surpassing distances, has determined the creation of an ultra-connected space that creates multiple contextualizations of the self. Through the digital revolution (let's say the last 30 years), it is clear that we have moved beyond tracing spatial borders homogenized by speed and have entered a space of virtuality where the "local" has imploded within the global and the distinction between the center and the periphery has been removed, or at least blurred, understanding that what happens in a "local neighbourhood is likely to be influenced by factors such as world money and commodity markets operating at an indefinite distance away from that neighbourhood itself" (Giddens, 1990, p. 64). In an attempt to create a hybrid space among various cultural traditions and histories, the tensions between centralization and decentralization of capital centers have become more porous

than ever. As Damrosch (2003) posits, “National literature is now a rather unmeaning term; The epoch of world literature is at hand” (p. 1).



## Appendix G

### Virtual and Glocal: Hybrid Spaces Part II

The global cultural space in the contemporary world is a hybrid space where perfection, authenticity, and genuineness are no longer sought, but the interaction among the cultural forms is undergoing continuous change. This virtual and glocal world with porous boundaries assumes a hyper-mobile movement of “speeds, axes, points of origin and termination, and varied relationships to institutional structures in different regions, nations, and societies” (Appadurai, 2001, p. 5). Any local manifestation cannot escape the variegated and overlapping paths of globalization, manifesting itself as a global event and acquiring new meanings, by displacement from the original framework where it was created. Cooppan (2004) argues that world literature provides students with opportunities of interconnectedness with texts as “the world is to constantly taste the past, to never disconnect past from future, one individual or text from another ... occupying an analogous space-time, at once engulfing and recursive, expansive and particular, conjunctive, and disruptive, emergent and haunted” (p. 26).

The hybrid space, where what is local and what is global interpenetrate one another, creating a new space of fragmentations where local elements are translated into global codes and world literature, acts “as a rebuke to national narrow mindedness or cosmopolitan monotonies” (Kristal, E., 2002, p. 73). This compressed space characteristically lacks a unique center, a center that, as Casanova (2007) makes apparent, radiates power and dominates the peripheral areas around it, turning them into adjacent spaces. Rather, this globalized space may be considered a “thirdspace” or an “in-between space” (Bhabba, 2006; Dalal, 2010) that represents a new understanding of the space situated beyond the materiality of the spatial forms (firstspace) or the transcendent structures that make space representation (secondspace) possible. Prendergast (2004) posits that “time inflected by space, moreover, yields a geography that is fluid rather than fixed” (p. 1).

This notion of breaking the binary of space aims at transcending limiting dichotomies and providing an alternate space of considering “the other”, “additional otherness”, and the exploration of new hybrid identities, making it impossible to isolate the local from the rest of the world, knowing that what is local is built on what is global. This transcendence aims to move beyond a “binary logic” often associated with world literature, aiming to open up a “limited and ‘partial’ view that is restricted to one half (or one third) of the literary field and further confined by a national, as opposed to global set of concerns” (Cooppan, 2004, p.17).

Just as the idea of glocalization denounces the arbitrariness of traditionally spatial categories, the idea of hybridization gives up the conservation of

traditional forms, decontextualizing them and combining them with a view to displaying a diversity of styles. This mix of cultural practices has led to approaching the global culture in terms of "creolization", "orientalization of culture", "the hegemony of rewriting the Eurocentre", or "translocated culture". It is important, however, to remember "where there is diversity or ambiguity of meaning, many critics assume it to be a property of the text rather than a consequence of diverse readerships" (Innes, 2006, p. 171)

## Appendix H

### The Nuances of Social Issues

One teacher, Laura, raised her hand and said, “ I teach my kids how to tolerate other cultures all the time. I teach tolerance and how to imagine if you were in the same situation.” She was adamant that she understood diversity and differing perspectives. Laura was sure she was teaching her students how to be sympathetic. What she didn’t realize was by teaching “tolerance,” she was unintentionally or subconsciously perpetuating power structures by using the word “tolerance.” The word “tolerance” reified power within the person “tolerating” the other, but Laura did not realize that at that time, and we didn’t use that platform to discuss it. Based on three additional discussions and an examination of Laura’s existing student assessments after our introductory session, I was able to determine Laura’s understanding of ‘tolerance’ was not what she eventually came to understand ‘tolerance’ to be by the end of the PD initiative. We recorded her name and considered what group discussion she would most benefit from after the introductory session. Another teacher, Sandra, spoke up and shared a unit idea she had:

I’m planning on teaching my kids about “little sexism.” I want them to know that there is “little sexism” everywhere. For example, parents often name their daughters flighty or whimsical names because they know they won’t be carrying on the family tradition once they get married, so they feel like they can be more liberal with their daughters’ names. But when they name their sons, they pick more serious names because they’re going to represent the family. So there’s “little sexism” everywhere (Introductory Meeting, Sandra, 2011).

Sandra definitely identified a diversity issue based around gender equality. However, as she continued to share about “little sexism,” she surrounded the term with air quotes each time, explaining that “little” was in reference to the fact that the sexism wasn’t “so much” or “so intense,” but it was still present. She chose the word “little” because it represented “less than” or “not as big” to her students. Her choice of “little” and her explanation as to why she was using “little” highlighted her room to grow in understanding “sexism.” I had an opportunity to respond to Sandra in real time in an attempt to gradually maneuver the thinking of the observing teachers sitting in the PD session. After I asked Sandra to explain why she chose “little,” I told her, most gently, that I actually disagreed with her. She was flabbergasted! She did not think that was what I was going to say, and she definitely didn’t think that was the message her district wanted me to give either. She was shocked, to say the least, until I said, “I agree that there is ‘little sexism’ as you shared embedded in all types of traditions laden throughout our society, like you mention the naming of daughters and sons, but where I disagree with you is the term ‘little.’” At that, Sandra quickly retracted to say, “Well, it doesn’t have to be ‘little’; it can be ‘small’ or something like that.” She was on the defense, and I knew I only had another minute or so before this situation was no longer going to be a learning moment and instead an ugly standoff. I answered with:

I might urge you to consider using "hidden sexism" rather than "little" because "little" quantifies something, you know. I mean if you could quantify sexism. "Little" gives the possibility of "a lot" of sexism, or just a "little sexism" or "a lot of racism" or just a "little racism." And in the end, we know, a little racism is the same as a lot of racism. Racism is racism. And the same goes for sexism. Sexism is sexism, whether it's a little or a lot (Introductory Meeting, Alison, 2011).

I could see that after I offered a different way of considering the term "little," teachers in the group, and even Sandra who was sharing her unit idea, opened their minds to consider what I had to say. They whispered to one another, some shook their heads in disagreement, and others raised their hands to add a suggestion or to ask clarifying questions. Whatever it was they did, I intentionally provoked them to think whether they agreed, disagreed, or wanted to share something else. I intentionally challenged them to take an active role in thinking, even if so slightly so they could imagine what discussions might be like in the professional development sessions that would follow that day's discussion.

After observing teachers during the discussion of the three statements, my PD team and I intentionally grouped teachers based on our observations of how deeply we thought they related to the three statements introduced at the beginning of the session. If they were new concepts to teachers, teachers were put into a separate session where they could delve deeper into what it meant to be a "cosmopolitan or 21st century citizen." If we garnered from the discussion that certain teachers already knew what each of the three statements meant in some authentic way (we decided based on their group discussion contributions, and their body language throughout the introductory meeting), we strategically grouped them into various sessions with teachers who considered themselves "new" to this way of thinking so they could be voices that might challenge other teachers to think further. We also strategically grouped some of these teachers into groups so that they could be pushed further if we felt that they still needed to be pushed a little further, even though they were sure they already knew everything.

Our next goal focused on charging teachers with a task. We tried to motivate teachers to become agents/advocates. We asked teachers to re-examine their understandings of "community," "diversity," and "perspectives" with a critical eye. For some teachers, this meant nothing and there was no response. For other teachers, sudden revelations caused them to feel emotionally invested and morally responsible for helping their students "see what was really happening."<sup>3</sup>

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<sup>3</sup>An 11<sup>th</sup> grade Mathematics teacher shared that she didn't really "see what was really happening" until she graduated University and became an 'adult'. She shared with us a time when she had a moment of realization that the 'American Dream' was actually a 'farce'. I had talked to her that day about how and why she came to this realization. She shared that she felt so 'duped'. I discussed the term "meritocracy" with her. She was unfamiliar with the term, but understood the concept. We discussed how there may not be a right or a wrong. Whether a "meritocracy" was true or false. Rather, I lead her to consider the following: (1) in what situations do you see successful meritocracy? (2) in what situations do you see unsuccessful meritocracy? (3) What countries use meritocracy as an 'illusion, a goal, a truth' and why? It wasn't important to me at that time to convince this teacher, or to confirm that what she now realized was indeed a shame,

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or actually a truth. Instead, it was my aim to help her see both sides of the concept; to question more deeply; to traverse an ambiguous space where there might not be an answer; to understand that she didn't necessarily have to decide on one side or the other; and that she too, as an educator, should help her students become comfortable with these concepts as well.